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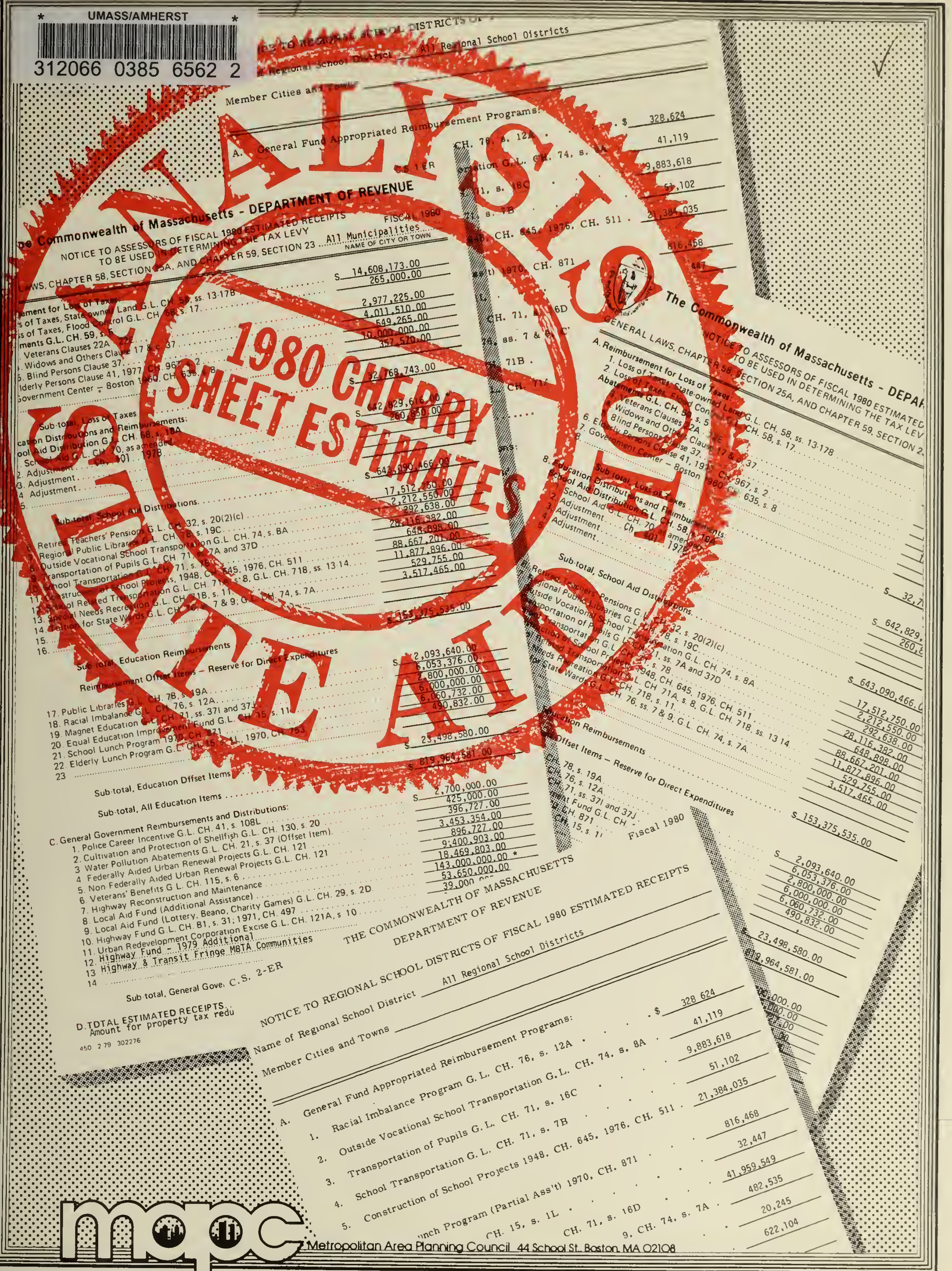

STATE AID ANALYSIS

1980 CHERRY SHEET ESTIMATES

mapc
Metropolitan Area Planning Council 44 School St. Boston, MA 02108

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ANALYSIS OF STATE AID

1980 Cherry Sheet Estimates

Metropolitan Area Planning Council
44 School Street
Boston, Massachusetts 02108
April 24, 1980

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ABOUT THIS REPORT

Analysis of State Aid was prepared by the staff of the Metropolitan Area Planning Council (MAPC) under the supervision of the Executive Director, Donald E. Megathlin, Jr. MAPC is a regional planning council made up of chief-elected and appointed officials from 101 greater Boston cities and towns, 11 state agency representatives, and 21 gubernatorial appointees. MAPC works with communities on issues important to the greater Boston region. Economic development, housing, land use, transportation, water quality, energy, hazardous materials, air quality and solid waste are current, target issues of MAPC involvement.

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INTRODUCTION

"Local aid", "state aid", "cherry sheet receipts--reimbursements and distributions" are all one and the same. They refer to the revenue the state shares with municipalities; revenue intended to assist communities in meeting their expenses. The money is primarily directed toward offsetting the costs of specific services. However, some is allotted for general expenses.

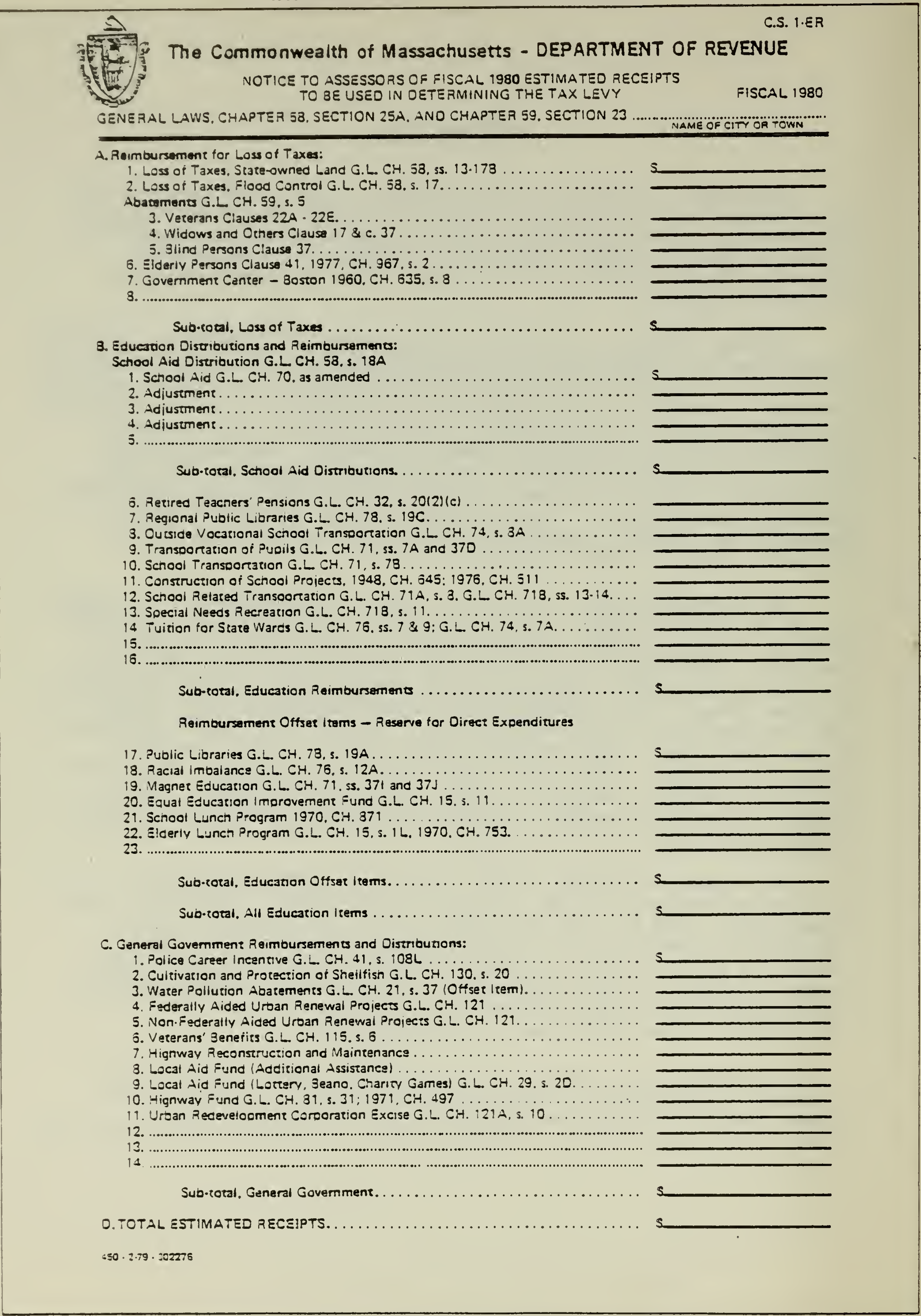
Although a number of directed reimbursements are intended to compensate communities for implementing state-mandated programs, the underlying goal of local aid is to assist local taxpayers with the financing of their municipal services. Currently, local services in Massachusetts are heavily supported by property taxes. The authority to finance services in this way was granted to municipalities by the state Legislature. The same authority also limited local governments to the taxation of property. Over the last decade, reliance on property taxes for local revenue has increasingly burdened property owners. The state has responded to this problem by expanding the programs through which funds are transferred to cities, towns and regional school districts.

The intergovernmental transfer of funds in Massachusetts is accounted for in the "cherry sheets." The cherry sheets are notices sent to cities, towns and regional school districts identifying the state's estimate of "receipts" and "charges" to them for the coming fiscal year. Originally, the cherry sheets were single, oversized sheets of pink colored paper with a ledger format listing certain debits (called assessments and charges) on the left side and certain credits (called distributions and reimbursements) on the right side. Hence the name "cherry sheet". Today, the cherry sheets are actually a set of two legal size sheets of paper. One is pink and lists "charges"; the other is green and lists "receipts". The new format resulted from changes in various assessments, distributions and reimbursements made with the enactment of Chapter 492 of the Acts of 1974.

This report will focus on cherry sheet "receipts"--state aid distributed through programs listed on the green page of the cherry sheets (see Figures 1 and 2). For the fiscal year of 1980, municipalities received aid directly via 37 programs listed on their cherry sheets and indirectly via 13 programs listed on the cherry sheets of the regional school districts to which they belong. Municipalities do receive other aid--state aid to housing and transit authorities. However, this aid is not included in the cherry sheets, nor in this analysis.

Examined in this report will be the cherry sheet aid directly and indirectly transferred to the 101 cities and towns of the MAPC region. Recent trends in aid will be compared to similar trends in local expenditures and tax rates. The distribution of aid among communities will

FIGURE 1
1980 CHERRY SHEET FOR MUNICIPALITIES - RECEIPTS



C.S. 1-ER

The Commonwealth of Massachusetts - DEPARTMENT OF REVENUE

NOTICE TO ASSESSORS OF FISCAL 1980 ESTIMATED RECEIPTS
TO BE USED IN DETERMINING THE TAX LEVY

FISCAL 1980

GENERAL LAWS, CHAPTER 58, SECTION 25A, AND CHAPTER 59, SECTION 23 ....
NAME OF CITY OR TOWN

A. Reimbursement for Loss of Taxes:

1. Loss of Taxes, State-owned Land G.L. CH. 58, ss. 13-17B .... $________
2. Loss of Taxes, Flood Control G.L. CH. 58, s. 17. .... ________

Abatements G.L. CH. 59, s. 5

3. Veterans Clauses 22A - 22E. .... ________
4. Widows and Others Clause 17 & c. 37 .... ________
5. Blind Persons Clause 37. .... ________
6. Elderly Persons Clause 41, 1977, CH. 967, s. 2 .... ________
7. Government Center – Boston 1960, CH. 635, s. 8 .... ________
8. .... ________

Sub-total, Loss of Taxes .... $________

B. Education Distributions and Reimbursements:

School Aid Distribution G.L. CH. 58, s. 18A

1. School Aid G.L. CH. 70, as amended .... $________
2. Adjustment .... ________
3. Adjustment .... ________
4. Adjustment .... ________
5. .... ________

Sub-total, School Aid Distributions .... $________

6. Retired Teachers' Pensions G.L. CH. 32, s. 20(2)(c) .... ________
7. Regional Public Libraries G.L. CH. 78, s. 19C. .... ________
8. Outside Vocational School Transportation G.L. CH. 74, s. 8A .... ________
9. Transportation of Pupils G.L. CH. 71, ss. 7A and 37D .... ________
10. School Transportation G.L. CH. 71, s. 7B .... ________
11. Construction of School Projects, 1948, CH. 645; 1976, CH. 511 .... ________
12. School Related Transportation G.L. CH. 71A, s. 8, G.L. CH. 71B, ss. 13-14. .... ________
13. Special Needs Recreation G.L. CH. 71B, s. 11. .... ________
14. Tuition for State Wards G.L. CH. 76, ss. 7 & 9; G.L. CH. 74, s. 7A. .... ________
15. .... ________
16. .... ________

Sub-total, Education Reimbursements .... $________

Reimbursement Offset Items – Reserve for Direct Expenditures

17. Public Libraries G.L. CH. 78, s. 19A .... $________
18. Racial Imbalance G.L. CH. 76, s. 12A. .... ________
19. Magnet Education G.L. CH. 71, ss. 37I and 37J .... ________
20. Equal Education Improvement Fund G.L. CH. 15, s. 11 .... ________
21. School Lunch Program 1970, CH. 871 .... ________
22. Elderly Lunch Program G.L. CH. 15, s. 1L, 1970, CH. 753. .... ________
23. .... ________

Sub-total, Education Offset Items .... $________

Sub-total, All Education Items .... $________

C. General Government Reimbursements and Distributions:

1. Police Career Incentive G.L. CH. 41, s. 108L .... $________
2. Cultivation and Protection of Shellfish G.L. CH. 130, s. 20 .... ________
3. Water Pollution Abatements G.L. CH. 21, s. 37 (Offset Item). .... ________
4. Federally Aided Urban Renewal Projects G.L. CH. 121 .... ________
5. Non-Federally Aided Urban Renewal Projects G.L. CH. 121. .... ________
6. Veterans' Benefits G.L. CH. 115, s. 6 .... ________
7. Highway Reconstruction and Maintenance .... ________
8. Local Aid Fund (Additional Assistance) .... ________
9. Local Aid Fund (Lottery, Beano, Charity Games) G.L. CH. 29, s. 2D. .... ________
10. Highway Fund G.L. CH. 81, s. 31; 1971, CH. 497 .... ________
11. Urban Redevelopment Corporation Excise G.L. CH. 121A, s. 10 .... ________
12. .... ________
13. .... ________
14. .... ________

Sub-total, General Government .... $________

D. TOTAL ESTIMATED RECEIPTS .... $________

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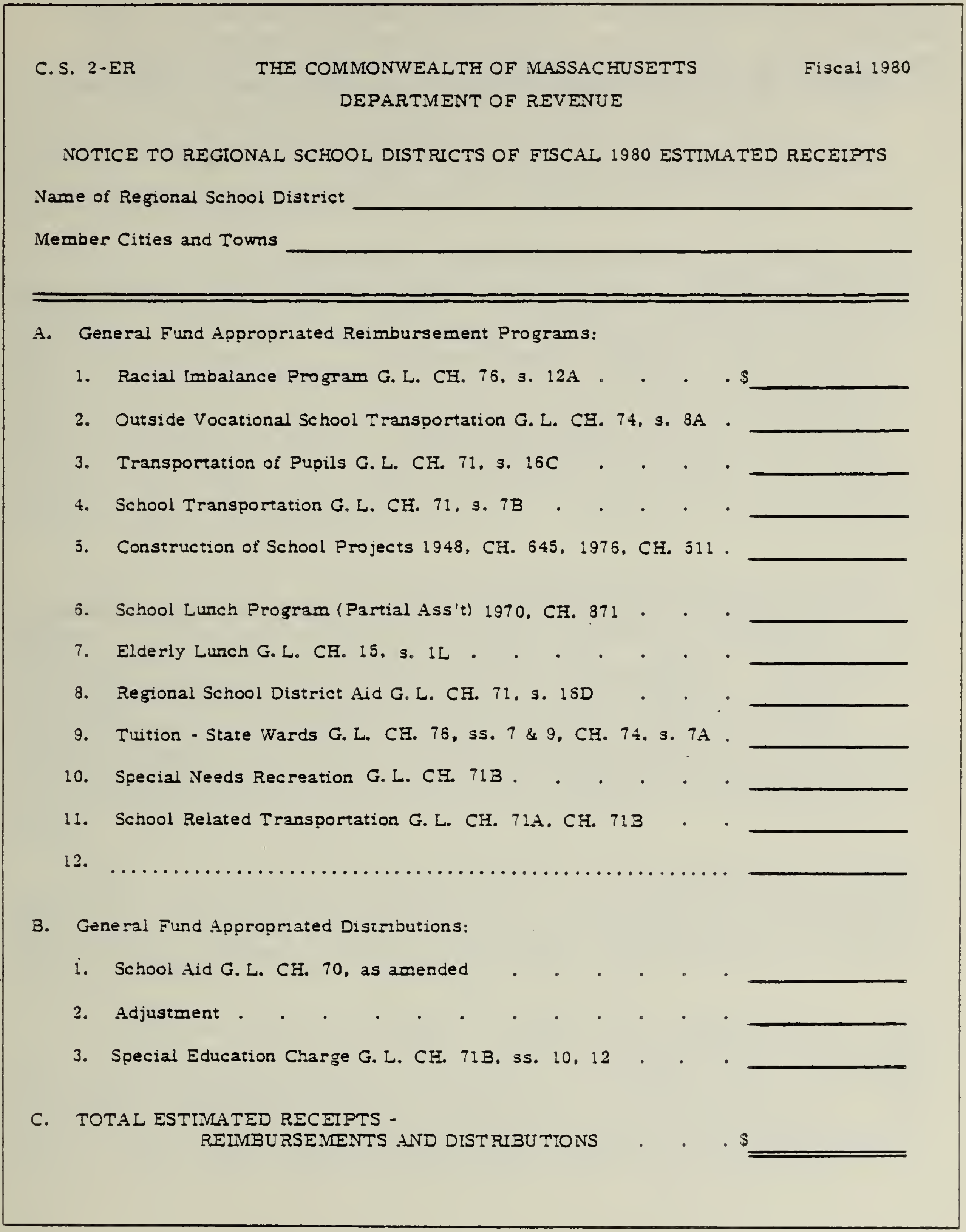
FIGURE 2
1980 CHERRY SHEET FOR REGIONAL SCHOOL DISTRICTS - RECEIPTS



C.S. 2-ER THE COMMONWEALTH OF MASSACHUSETTS Fiscal 1980
DEPARTMENT OF REVENUE

NOTICE TO REGIONAL SCHOOL DISTRICTS OF FISCAL 1980 ESTIMATED RECEIPTS

Name of Regional School District ____________________

Member Cities and Towns ____________________

A. General Fund Appropriated Reimbursement Programs:

1. Racial Imbalance Program G. L. CH. 76, s. 12A . . . . . $ ________
2. Outside Vocational School Transportation G. L. CH. 74, s. 8A . ________
3. Transportation of Pupils G. L. CH. 71, s. 16C . . . . . ________
4. School Transportation G. L. CH. 71, s. 7B . . . . . . ________
5. Construction of School Projects 1948, CH. 645, 1976, CH. 511 . ________
6. School Lunch Program (Partial Ass't) 1970, CH. 871 . . . ________
7. Elderly Lunch G. L. CH. 15, s. 1L . . . . ________
8. Regional School District Aid G. L. CH. 71, s. 16D . . . ________
9. Tuition - State Wards G. L. CH. 76, ss. 7 & 9, CH. 74, s. 7A . ________
10. Special Needs Recreation G. L. CH. 71B . . . . ________
11. School Related Transportation G. L. CH. 71A, CH. 71B . . ________
12. .... ________

B. General Fund Appropriated Distributions:

1. School Aid G. L. CH. 70, as amended . . . . ________
2. Adjustment . . . . ________
3. Special Education Charge G. L. CH. 71B, ss. 10, 12 . . . ________

C. TOTAL ESTIMATED RECEIPTS -
REIMBURSEMENTS AND DISTRIBUTIONS . . . . $ ________

be compared by per capita income, property valuation per pupil and per pupil expenditures versus per pupil school aid, and, per capita income, property value per capita and per capita expenditures versus per capita non-school aid. Finally, the impacts of state aid transfers on local finances will be examined by a review of the impacts of both total aid and the 1980 "additional aid" distributed for the reduction of property taxes.

SUMMARY

In 1980, cities and towns in the MAPC region received $596 million in state aid, 47 percent of the money distributed statewide. For most communities, the 1980 distribution was an increase over last year. Increases ranged from one percent in Wenham to 61 percent in Watertown. Five communities did receive less aid. However, their $278,000 loss was overshadowed by the $84 million gain for the region as a whole.

State aid can be broken down into school aid and non-school aid. The mean per pupil distribution of school aid was $582. Fifteen communities received considerably more than this. The mean per capita distribution of non-school aid was $42. Twelve communities received significantly high per capita distributions. Bellingham, Boston, Chelsea, Lynn, Malden, Revere, Rockland and Somerville all were the recipients of high distributions of both school and non-school aid. All of these communities are among the poorer (in terms of income and property value) of the region. Some are the poorest. For some, state aid amounts to 30 percent or more of municipal revenue. The average regionwide is 21 percent. For these poorer communities, state aid accounts for a reduction of 30 to 50 percent in their full value tax rates.

State aid did not have as great an impact on the wealthier communities of Dover, Brookline, Marblehead, Manchester, Rockport, Wellesley and Weston. All received average or well below average distributions of aid. School aid to most was less that $400 per pupil. Distributions of non-school aid went as low as $24 per capita (Marblehead). There were a few communities who had above average per capita incomes, per pupil equalized assessed property valuations and/or per capita equalized assessed property valuations, yet received significantly high distributions of school or non-school aid. Generally, the majority of communities received distributions not extraordinarily different from their relative need.

While aid to cities and towns increased on the average of 17 percent from 1979 to 1980, municipal expenditures increased by only three percent. This and the fact that state aid accounts for an average of 21 percent of local revenue resulted in virtually no change in the average tax rate for 1980 was $41.81, only one percent higher than 1979.

In 1980, the state distributed an "additional" $166 million to cities, towns and regional school districts statewide. The purpose of this money was to help communities reduce tax rates. In the MAPC region, the average reduction due specifically to this money was $1.67 (three percent). The impact was much greater on some communities. In fact, nearly all of the poorer communities--in terms of the three indicators studied--had above average reductions in their tax rates due to this "additional aid".

1980 CHERRY SHEET ESTIMATES

In 1980, $595,692,504 is estimated to be transferred to the cities and towns in the MAPC region. Seventy-four percent of this revenue or $440,340,068 is directed to local and regional public education. Table 1 shows those disbursements to be made for local, regional academic, regional vocational and regional agricultural school systems.

Most school aid to MAPC communities is distributed directly via municipal cherry sheets. Direct disbursements amount to 91 percent or $402 million. These figures, and the figures relating to school aid and total aid throughout this report, do not include some $18 million reimbursed to cities and towns under "Retired Teachers' Pensions"--item B.6. of municipal cherry sheets. Under the state's retirement system for teachers, when an individual transfers from a teaching position to some other municipal job, and vice versa, the money paid into the system is transferred into the individual's new retirement program. In the case of cherry sheet item B.6., the money is transferred to the municipality's retirement program. Because Boston has its own teachers' retirement system, the transfer to it is substantial ($17.5 million). Since this is a transfer among programs benefiting individual employees and not aid to the municipality, this program and the aid reimbursed through it have not been included in this report.

Indirect disbursements make up the remaining nine percent of aid for education to the cities and towns in the MAPC region. This $38 million in receipts to each community via regional school districts was calculated by taking the proportional membership of each community to a school district (provided by the State Department of Education) and multiplying it by the total cherry sheet estimate of aid to that school district. As you can see from Table 1, many communities did not receive regional school aid in all three categories, and some received none. Communities such as Hamilton and Wenham have small or nonexistent local school systems and therefore participate in, and receive aid from, all three. Twelve communities--Boston, Cambridge, Duxbury, Everett, Hingham, Hull, Marshfield, Medford, Newton, Somerville, Waltham and Watertown--do not participate in regional school systems, thereby receiving no aid through them. Of the remaining 89 communities which are members of regional school districts, 79 belong to vocational districts bringing them $25 million in indirect aid for education.

Besides the $440 million in education aid, cherry sheet estimates to MAPC communities for non-education items amount to $155,352,436. "Other items" as they are identified in Table 2 refer to Sections A. and C. of the cherry sheets--"Reimbursements for Loss of Taxes" and "General Government Reimbursements and Distributions". Table 2 shows the distribution. Every community received non-education aid, some as little as $90,000 and some as much as $53 million.

TABLE 1
DIRECT AND INDIRECT SATE AID DISBURSEMENTS FOR EDUCATION, 1980

Community	Local*	Regional Academ.	Regional Vocation.	Regional Agricult'l.	Total*
Acton	$ 863,508	$ 1,550,448	$ 369,543	$ --	$ 2,783,499
Arlington	4,036,323	--	938,574	--	4,974,897
Ashland	869,394	--	364,193	--	1,233,587
Bedford	1,331,338	--	220,481	--	1,551,819
Bellingham	3,447,387	--	177,882	14,329	3,639,598
Belmont	2,171,583	--	291,056		2,462,639
Beverly	3,445,834	--	204,872	112,493	3,763,199
Bolton	159,349	182,269	--	--	341,618
Boston	123,139,799	--	--	--	123,131,799
Boxborough	120,344	158,977	85,023	--	364,349
Braintree	3,396,787	--	802,920	16,821	4,216,528
Brookline	3,305,123	--	--	2,492	3,307,615
Burlington	3,271,403	--	542,353	--	3,813,756
Cambridge	9,160,913	--	--	--	9,160,913
Canton	1,865,456	--	475,805	9,345	2,350,606
Carlisle	208,839	174,177	42,514	--	425,530
Chelsea	5,386,666	--	196,518	--	5,583,184
Cohasset	870,778	--	19,444	19,313	909,535
Concord	1,282,344	994,798	179,866	--	2,457,008
Danvers	2,153,557	--	176,368	104,994	2,434,919
Dedham	2,369,631	--	44,351	62,300	2,476,282
Dover	342,641	339,298	--	2,492	684,431
Duxbury	1,734,094	--	--	--	1,734,094
Essex	237,298	--	30,285	16,249	283,832
Everett	2,753,259	--	--	--	2,753,259
Foxborough	2,023,815	--	188,297	21,182	2,233,294
Framingham	6,747,414	--	1,959,707	--	8,707,121
Franklin	3,110,628	--	467,572	21,182	3,599,382
Gloucester	3,568,723	--	121,142	61,246	3,751,111
Hamilton	2,503	918,523	21,378	19,999	962,403
Hanover	1,893,987	--	131,247	--	2,025,234
Hingham	2,387,298	--	--	--	2,387,298
Holbrook	1,527,979	--	512,977	21,182	2,062,138
Holliston	2,055,217	--	300,604	--	2,355,821
Hopkinton	606,370	--	265,919	--	872,289
Hudson	2,597,881	--	894,451	--	3,492,332
Hull	1,955,194	--	--	--	1,955,194
Ipswich	1,184,388	--	--	39,998	1,224,386
Lexington	3,557,346	--	529,787	--	4,087,133
Lincoln	613,614	321,521	94,838	--	1,029,973
Littleton	672,956	--	121,888	--	794,844
Lynn	18,000,442	--	--	141,241	18.141,683
Lynnfield	1,239,252	--	58,789	13,749	1,311,790
Malden	8,962,095	--	486,124	--	9,448,219
Manchester	486,982	--	12,470	11,249	510.701
Marblehead	1,432,242	--	35,630	29,998	1,497,870
Marlborough	4,162,993	--	1,104,701	--	5,267,694
Marshfield	2,723,034	--	--	--	2,723,034
Maynard	1,102,510	--	327,847	--	1,430,357
Medfield	1,396,906	--	256,170	4,984	1,658,060
Medford	$ 6,746,511	$ --	$ --	$ --	$ 6,746,511
Medway	1,647,404	--	226,325	2,492	1,876,221
Melrose	3,878,626	--	313,740	--	4,192,366
Middleton	195,011	--	58,789	--	253,800
Milford	4,229,794	--	184,351	--	4,414,145
Millis	906,637	--	146,738	4,984	1,058,359
Milton	1,280,570	--	44,351	14,329	1,339,250
Nahant	238,954	--	--	6,250	245,204
Natick	3,049,279	--	44,351	--	3,093,630
Needham	2,221,677	--	--	14,329	2,236,006
Newton	7,621,275	--	--	--	7,621,275
Norfolk	354,895	723,502	116,893	4,984	1,200,274
N. Reading	1,629,750	--	131,460	--	1,761,210
Norwell	1,894,650	--	106,942	--	2,001,592
Norwood	3,239,214	--	535,280	26,166	3,800,660
Peabody	6,739,229	--	--	126,242	6,865,471
Pembroke	1,389,843	1,999,412	--	--	3,389,255
Quincy	8,733,116	--	--	74,137	8,807,253
Randolph	4,331,472	--	996,216	19,313	5,347,001
Reading	2,537,368	--	289,606	--	2,826,974
Revere	7,609,813	--	358,560	--	7,968,373
Rockland	3,189,975	--	201,732	--	3,391,707
Rockport	336,942	--	23,159	19,999	380,100
Salem	3,800,914	--	142,520	104,994	4,048,428
Saugus	2,659,070	--	334,426	46,247	3,039,743
Scituate	2,478,075	--	181,478	--	2,659,553
Sharon	1,767,098	--	163,602	42,987	1,973,687
Sherborn	272,945	369,048	119,380	--	761,373
Somerville	14,751,053	--	--	--	14,751,053
Southborough	469,730	320,340	277,957	--	1,068,027
Stoneham	1,807,676	--	237,891	--	2,045,567
Stoughton	2,797,865	--	311,770	26,166	3,135,801
Stow	449,647	642,477	150,433	--	1,242,557
Sudbury	1,515,670	1,525,880	320,489	--	3,362,039
Swampscott	1,360,512	--	73,041	22,499	1,456,052
Topsfield	463,796	--	16,033	18,749	498,578
Wakefield	2,943,353	--	293,054	--	3,236,407
Walpole	2,692,797	--	457,623	100,303	3,250,723
Waltham	5,175,049	--	--	--	5,175,049
Watertown	3,343,427	--	--	--	3,343,427
Wayland	2,072,400	--	235,461	--	2,307,861
Wellesley	2,562,790	--	44,351	13,083	2,620,224
Wenham	--	428,285	8,907	13,749	450,941
Weston	1,564,286	--	32,703	--	1,596,989
Westwood	1,472,287	148,689	--	2,492	1,623,468
Weymouth	7,909,104	--	--	47,971	7,957,075
Wilmington	2,410,100	--	626,446	--	3,036,546
Winchester	2,252,060	--	199,966	--	2,452,026
Winthrop	3,005,813	--	155,146	--	3,160,959
Woburn	4,159,890	--	451,647	--	4,611,537
Wrentham	406,060	877,390	--	11,837	1,295,287

*Does not include reimbursements for "Retired Teachers' Pensions":
Boston-$17,500,000; Framingham-$2,400; Holbrook-$1,200; Lynn-$1,200;
Marblehead-$1,550; Medway-$1,200; Somerville-$1,500.

Sources: Massachusetts Department of Revenue, 1980.
Massachusetts Department of Education, 1980.

TABLE 2
STATE AID DISBURSEMENTS, 1980

Community	Education*	Other Items**	Total*
Acton	$ 2,783,499	$ 660,077	$ 3,443,576
Arlington	4,974,897	1,897,015	6,871,912
Ashland	1,233,587	410,005	1,643,592
Bedford	1,551,819	530,740	2,082,559
Bellingham	3,639,598	792,498	4,432,096
Belmont	2,462,639	789,723	3,252,367
Beverly	3,763,199	1,544,998	5,308,197
Bolton	341,618	120,690	462,308
Boston	123,131,799	53,434,194	176,656,993
Boxborough	364,349	90,351	454,700
Braintree	4,216,528	1,126,772	5,343,300
Brookline	3,307,615	2,075,677	5,383,292
Burlington	3,813,756	738,657	4,552,413
Cambridge	9,160,913	5,060,833	14,221,746
Canton	2,350,606	746,414	3,097,020
Carlisle	425,530	273,424	968,954
Chelsea	5,583,184	1,941,386	7,524,570
Cohasset	909,535	227,904	1,137,439
Concord	2,457,008	711,772	3,168,780
Danvers	2,434,919	883,113	3,318,032
Dedham	2,476,282	939,045	3,415,327
Dover	684,431	129,589	814,020
Duxbury	1,734,094	382,384	2,116,478
Essex	283,832	128,341	412,173
Everett	2,753,259	997,200	3,750,459
Foxborough	2,233,294	710,201	2,943,495
Framingham	8,707,121	2.717,669	11,424,790
Franklin	3,599,382	920,060	4,519,442
Gloucester	3,751,111	1,211,479	4,962,590
Hamilton	962,403	257,018	1,219,421
Hanover	2,025,234	374,048	2,399,282
Hingham	2,387,298	622,151	3,009,449
Holbrook	2,062,138	513,102	2,575,240
Holliston	2,355,821	497,664	2,853,485
Hopkinton	872,289	342,344	1,214,633
Hudson	3,492,332	832,421	4,324,753
Hull	1,955,194	510,846	2,466,040
Ipswich	1,224,386	645,532	1,869,918
Lexington	4,087,133	852,094	4,939,227
Lincoln	1,029,973	252,267	1,282,240
Littleton	794,844	259,297	1,054,141
Lynn	18,141,683	5,202,325	23,344,008
Lynnfield	1,311,790	417,801	1,729,591
Malden	9,448,219	3,113,280	12,561,499
Manchester	510,701	145,911	656,612
Marblehead	1,497,870	508,958	2,006,828
Marlborough	5,267,694	1,413,316	6,681,010
Marshfield	2,723,034	732,123	3,455,157
Maynard	1,430,357	438,656	1,869,013
Medfield	1,658,060	589,977	2,248,037
Medford	$ 6,746,511	$ 3,084,831	$ 9,831,342
Medway	1,876,221	323,179	2,199,400
Melrose	4,192,366	1,342,418	5,534,784
Middleton	253,800	195,447	449,247
Milford	4,414,145	1,233,951	5,648,096
Millis	1,058,359	311,373	1,369,732
Milton	1,339,250	948,603	2,287,853
Nahant	245,204	138,044	383,248
Natick	3,093,630	1,155,296	4,248,926
Needham	2,236,006	837,353	3,073,359
Newton	7,621,275	2,783,229	10,404,504
Norfolk	1,200,274	431,453	1,631,727
N. Reading	1,761,210	487,743	2,248,953
Norwell	2,001,592	319,850	2,321,442
Norwood	3,800,660	1,132,364	4,933,024
Peabody	6,865,471	1,963,229	8,828,700
Pembroke	3,389,255	593,760	3,983,015
Quincy	8,807,253	4,093,764	12,901,017
Randolph	5,347,001	1,285,077	6,632,078
Reading	2,826,974	893,712	7,320,686
Revere	7,968,373	2,254,256	10,222,629
Rockland	3,391,707	968,666	4,360,373
Rockport	380,100	189,030	569,130
Salem	4,048,428	1,836,455	5,884,883
Saugus	3,039,743	849,711	3,889,454
Scituate	2,659,553	649,396	3,308,949
Sharon	1,973,687	523,897	2,497,584
Sherborn	761,373	160,969	922,342
Somerville	14,751,053	5,099,693	19,850,746
Southborough	1,068,027	232,560	1,300,587
Stoneham	2,045,567	784,327	2,829,894
Stoughton	3,135,801	1,157,379	4,293,180
Stow	1,242,557	180,946	1,423,503
Sudbury	3,362,039	487,649	3,849,688
Swampscott	1,456,052	484,036	1,940,115
Topsfield	498,578	215,402	713,980
Wakefield	3,236,407	1,102,758	4,339,165
Walpole	3,250,723	724,004	3,974,727
Waltham	5,175,049	2,150,687	7,325,736
Watertown	3,343,427	1,491,095	4,834,522
Wayland	2,307,861	440,948	2,748,809
Wellesley	2,620,224	660,281	3,280,505
Wenham	450,941	109,736	560,677
Weston	1,596,989	302,248	1,899,237
Westwood	1,623,468	467,666	2,091,134
Weymouth	7,957,075	2,538,416	10,495,491
Wilmington	3,036,546	659,841	3,696,387
Winchester	2,452,026	655,866	3,107,892
Winthrop	3,160,959	961,916	4,122,875
Woburn	4,611,537	1,242,277	5,853,814
Wrentham	1,295,287	535,872	1,831,159

* Does not include reimbursements for "Retired Teacher's Pensions":
Boston - $17,500,000; Framingham - $2,400; Holbrook - $1,200;
Lynn - $1,200; Marblehead - $1,550; Medway - $1,200; Somerville - $1,500.

** Refers to non-education items - "Loss of Taxes" and "General Government" reimbursements and distributions.

Sources: Massachusetts Department of Revenue, 1980.
Massachusetts Department of Education, 1980.

The $596 million in total cherry sheet aid for MAPC communities in 1980 is 47 percent of the money distributed statewide. Cities and towns in Massachusetts received $1.277 billion via the cherry sheets. Education aid is $951 million (75 percent) of this while non-education aid is $326 million. MAPC communities received 46 percent of the state aid for education, 48 percent of the aid for "Loss of Taxes" and "General Government".

RECENT TRENDS

For most communities in the MAPC region, the 1980 state aid estimate was an increase over last year. Increases varied greatly, however (see Table 3). Wenham received only a $7,000 increase, one percent of its 1979 aid, while Boston was the beneficiary of an $18 million increase. Although Boston received a large dollar increase in aid, percentage-wise it was not the greatest. Its 12 percent increase was relatively low compared to most others.

The mean for all communities in the region was 17 percent. Thirty communities were higher. Seven of these were considerably higher. Topping the list were Watertown at 61 percent, Chelsea at 55 percent and Stow at 52 percent, followed by Revere, Quincy, Carlisle and Peabody, all in the 40 percentile.

Five communities did not do as well as the majority. Dover, Hamilton, Marblehead, Melrose and Wakefield received a total of $278,000 less in 1980 than they did in 1979. For Hamilton this amounted to a one percent decrease, for Marblehead four percent. The others fell in between.

These decreases did not have a dramatic effect on the change in aid to the region as a whole. Aid to the region increased $84 million. This 16 percent increase in aid was equal to the percentage increase statewide.

Municipal expenditures in the MAPC region, from 1979 to 1980, increased by $87 million, roughly the same dollar amount as aid. However, where aid to municipalities increased on the average of 17 percent, local expenditures rose only three percent. Expenditures did increase in the majority of communities. From Table 4 one can see that most increases were relatively low and that a significant number of communities (20) actually reduced their expenditures.

There was virtually no change in the mean full value tax rate for the region from 1979 to 1980. The mean was $41.87, up $.15 or less than one percent from 1979. Statewide there was a change in the average tax rate. It went down in 1980 to $43.75 (a decrease of $1.09 or two percent).

Fifty-seven communities in the MAPC region held their full value tax rates constant or lowered them (see Table 5). Some communities dropped their tax rates by as much as 14 percent. Millis reduced its tax rate by $6.76. On the other hand, Quincy increased its rate by $21.93, 52 percent over 1979. No other tax rates increased nearly as much. All others were less than 15 percent and most of those were less than 10 percent.

Percentage changes in municipal expenditures, state aid and full value tax rates are all presented for comparison in Table 6. With the exception of Wakefield, all communities which reduced their full value tax rates from 1979 received more aid in 1980 than in 1979. Wakefield received less aid in 1980 than in 1979 and yet was able to reduce its tax rate. Four other communities received less aid in 1980 than in 1979. Unlike Wakefield, however, the equalized tax rates of each increased.

TABLE 3
RECENT TRENDS IN AID, 1979 TO 1980

Community	1979	1980	1979-80 Dollar	Change Percent
Acton	$ 3,115,649	$ 3,443,576	$ 327,927	11 %
Arlington	5,733,655	6,871,912	1,138,257	20
Ashland	1,510,410	1,643,592	133,182	9
Bedford	1,835,937	2,082,559	246,622	13
Bellingham	3,547,403	4,432,096	884,693	25
Belmont	2,581,695	3,252,367	670,672	26
Beverly	4,566,460	5,308,197	741,737	16
Bolton	423,744	462,308	38,564	9
Boston	158,412,931	176,656,993	18,244,062	12
Boxborough	391,652	454,700	63,048	16
Braintree	4,640,726	5,343,300	702,574	15
Brookline	4,862,578	5,383,292	520,714	11
Burlington	3,675,608	4,552,413	876,805	24
Cambridge	12,193,965	14,221,746	2,027,781	17
Canton	2,711,897	3,097,020	385,123	14
Carlisle	657,842	968,954	311,112	47
Chelsea	4,854,645	7,524,570	2,669,925	55
Cohasset	885,319	1,137,439	252,120	28
Concord	2,919,022	3,168,780	249,758	9
Danvers	2,985,913	3,318,032	332,119	11
Dedham	2,990,760	3,415,327	424,567	14
Dover	827,859	814,020	-13,839	-2
Duxbury	1,996,059	2,116,478	120,419	6
Essex	350,181	412,173	61,992	18
Everett	3,361,580	3,750,459	388,879	12
Foxborough	2,689,334	2,943,495	254,161	9
Framingham	10,311,408	11,424,790	1,113,382	11
Franklin	3,804,934	4,519,442	714,508	19
Gloucester	4,321,353	4,962,590	641,237	15
Hamilton	1,226,853	1,219,421	-7,432	-1
Hanover	2,183,499	2,399,282	215;783	10
Hingham	2,689,410	3,009,449	320,039	12
Holbrook	2,394,340	2,575,240	180,900	8
Holliston	2,602,671	2,853,485	250,814	10
Hopkinton	987,611	1,214,633	227,022	23
Hudson	3,961,038	4,324,753	363,715	10
Hull	2,250,471	2,466,040	215,569	10
Ipswich	1,651,817	1,869,918	218,101	13
Lexington	4,456,367	4,939,227	482,860	11
Lincoln	1,155,239	1,282,240	127,001	11
Littleton	914,858	1,054,141	139,283	15
Lynn	17,770,074	23,344,008	5,573,934	31
Lynnfield	1,558,377	1,729,591	171,214	11
Malden	11,144,300	12,561,499	1,417,199	13
Manchester	593,552	656,612	63,060	11
Marblehead	2,092,667	2,006,828	-85,839	-4
Marlborough	6,150,489	6,681,010	530,521	9
Marshfield	3,067,096	3,455,157	388,061	13
Maynard	1,517,578	1,869,013	351,435	23
Medfield	1,887,913	2,248,037	360,124	19
Medford	$ 7,930,589	$ 9,831,342	$ 1,900,753	24 %
Medway	1,884,559	2,199,400	314,841	17
Melrose	5,577,688	5,534,784	-42,904	-1
Middleton	396,809	449,247	52,438	13
Milford	4,926,295	5,648,096	721,801	15
Millis	1,066,108	1,369,732	303,624	28
Milton	1,847,193	2,287,853	440,660	24
Nahant	303,854	383,248	79,394	26
Natick	3,702,588	4,248,926	546,338	15
Needham	2,859,517	3,073,359	213,842	7
Newton	9,205,806	10,404,504	1,198,698	13
Norfolk	1,491,180	1,631,727	140,547	9
N. Reading	2,029,181	2,248,953	219,772	11
Norwell	2,153,357	2,321,442	168,085	8
Norwood	4,272,115	4,933,024	660,909	15
Peabody	6,122,608	8,828,700	2,706,092	44
Pembroke	3,614,783	3,983,015	368,232	10
Quincy	11,196,540	12,901,017	1,704,477	47
Randolph	5,932,084	6,632,078	699,994	15
Reading	3,312,207	7,320,686	4,008,479	12
Revere	6,902,325	10,222,629	3,320,304	48
Rockland	3,805,151	4,360,373	555,222	16
Rockport	486,042	569,130	83,088	17
Salem	5,310,184	5,884,883	574,699	11
Saugus	3,538,775	3,889,454	350,679	10
Scituate	2,987,797	3,308,949	321,152	11
Sharon	2,207,211	2,497,584	290,373	13
Sherborn	729,591	922,342	192,751	26
Somerville	15,408,315	19,850,746	4,442,431	29
Southborough	1,214,968	1,300,587	85,619	7
Stoneham	2,445,417	2,829,894	384,477	16
Stoughton	3,523,775	4,293,180	769,405	22
Stow	933,657	1,423,503	489,846	52
Sudbury	3,483,558	3,849,688	366,130	11
Swampscott	1,488,604	1,940,115	451,511	30
Topsfield	633,925	713,980	80,055	13
Wakefield	4,467,620	4,339,165	-128,455	-3
Walpole	3,171,591	3,974,727	803,136	25
Waltham	5,923,717	7,325,736	1,402,019	24
Watertown	2,997,187	4,834,522	1,837,335	61
Wayland	2,295,772	2,748,809	453,037	20
Wellesley	2,885,458	3,280.505	395,047	14
Wenham	553,714	560,677	6,963	1
Weston	1,679,255	1,899,237	219,982	13
Westwood	1,899,673	2,091,134	191,461	10
Weymouth	9,238,185	10,495,491	1,257,306	14
Wilmington	3,351,224	3,696,387	345,163	10
Winchester	2,586,378	3,107,892	521,514	20
Winthrop	3,747,447	4,122,875	375,428	10
Woburn	5,211,558	5,853,814	642,256	12
Wrentham	1,704,891	1,831,159	126,268	7

* Does not include 1980 reimbursements for "Retired Teacher's Pensions":
Boston - $17,500,000; Framingham - $2,400; Holbrook - $1,200;
Lynn - $1,200; Marblehead - $1,550; Medway - $1,200; Somerville - $1,500.

** Does not include 1979 reimbursements for "Retired Teacher's Pensions":
Boston - $17,100,000; Framingham - $2,400; Lynn - $1,200;

Sources: Massachusetts Department of Revenue, 1979 and 1980.
Massachusetts Department of Education, 1980.

TABLE 4
RECENT TRENDS IN EXPENDITURES, 1979 TO 1980
(THOUSANDS OF DOLLARS)

Community	1979	1980	1979 - 1980 Change Dollar	 Percent
Acton	$ 14,289	$ 14,230	$ -59	0 %
Arlington	41,790	41,839	49	0
Ashland	7,902	7,811	-91	-1
Bedford	13,119	13,055	-64	-1
Bellingham	9,894	10,652	758	8
Belmont	24,040	24,505	465	2
Beverly	30,664	31,228	564	2
Bolton	1,796	1,876	80	5
Boston	792,933	794,665	1,732	0
Boxborough	1,916	2,066	150	8
Braintree	37,789	38,816	1,027	3
Brookline	56,793	58,714	1,921	3
Burlington	25,976	27,001	1,025	4
Cambridge	120,535	127,344	6,809	6
Canton	16,785	17,097	312	2
Carlisle	3,085	3,204	119	4
Chelsea	22,733	23,915	1,182	5
Cohasset	7,388	7,411	23	0
Concord	16,626	17,404	778	5
Danvers	34,518	35,445	927	3
Dedham	20,946	21,770	824	4
Dover	4,758	5,065	307	6
Duxbury	12,736	13,152	216	3
Essex	2,142	2,429	287	13
Everett	37,125	38,314	1,189	3
Foxborough	11,472	12,277	805	7
Framingham	56,301	57,830	1,529	3
Franklin	14,731	15,092	361	3
Gloucester	24,027	25,412	1,385	6
Hamilton	4,544	4,349	-195	-4
Hanover	11,138	10,968	-170	-2
Hingham	17,622	18,787	1,165	7
Holbrook	8,370	9,286	916	6
Holliston	10,668	11,310	642	6
Hopkinton	5,078	5,311	233	5
Hudson	12,851	12,485	-366	-3
Hull	11,311	14,144	2,803	25
Ipswich	9,687	9,339	-348	-4
Lexington	32,620	33,092	472	1
Lincoln	5,803	5,611	-192	-3
Littleton	5,416	5,666	250	5
Lynn	73,324	78,322	4,998	7
Lynnfield	9,399	9,398	-1	0
Malden	43,034	43,320	286	1
Manchester	5,206	5,440	234	5
Marblehead	20,192	21,078	886	4
Marlborough	23,679	23,976	297	1
Marshfield	18,397	18,918	521	3
Maynard	8,532	8,476	-56	-1
Medfield	8,851	9,064	113	2

Community	1979	1980	1979 - 1980 Chang Dollar	 Percen
Medford	$ 44,893	$ 47,085	$ 2,192	5
Medway	7,334	8,332	998	14
Melrose	24,823	25,460	637	3
Middleton	5,416	5,219	-197	-4
Milford	17,507	18,075	568	3
Millis	5,903	5,698	-205	-4
Milton	20,334	20,797	463	2
Nahant	2,982	3,240	258	9
Natick	26,414	29,196	2,782	11
Needham	32,642	34,662	2,020	6
Newton	89,600	93,194	3,594	4
Norfolk	4,195	4,208	13	0
N. Reading	9,682	10,107	425	4
Norwell	9,463	9,735	272	3
Norwood	34,132	36,392	2,260	7
Peabody	41,754	43,986	2,232	5
Pembroke	10,358	9,511	-847	-8
Quincy	107,331	112,780	5,449	5
Randolph	22,697	23,758	1,061	5
Reading	20,363	20,822	459	2
Revere	36,047	36,971	924	3
Rockland	12,540	13,233	693	6
Rockport	5,298	5,433	135	3
Salem	41,646	45,166	3,520	9
Saugus	20,761	20,655	-106	-1
Scituate	17,140	17,582	442	3
Sharon	12,459	13,047	588	5
Sherborn	4,328	4,360	32	1
Somerville	59,821	61,255	1,434	2
Southborough	5,818	5,886	68	1
Stoneham	17,264	17,192	-72	0
Stoughton	18,912	19,502	590	3
Stow	4,034	4,194	160	4
Sudbury	14,365	13,907	-458	-3
Swampscott	13,575	13,926	351	3
Topsfield	4,500	4,495	-5	0
Wakefield	22,643	22,663	20	0
Walpole	17,235	17,631	396	2
Waltham	49,961	51,789	1,828	4
Watertown	31,330	33,072	1,742	6
Wayland	13,953	14,319	366	3
Wellesley	29,303	29,148	-155	-1
Wenham	2,434	2,308	-126	-5
Weston	13,939	14,324	385	3
Westwood	13,796	14,603	807	6
Weymouth	48,501	47,274	-1,227	-3
Wilmington	17,019	17,736	717	4
Winchester	21,292	21,961	669	3
Winthrop	12,763	13,042	279	2
Woburn	30,258	31,621	1,363	5
Wrentham	5,216	5,433	217	4

Source: Massachusetts Taxpayers Foundation, 1979 and 1980.

TABLE 5
RECENT TRENDS IN FULL VALUE TAX RATES, 1979 TO 1980

Community	1979	1980	1979 - 1980 Change Dollar	1979 - 1980 Change Percent
Acton	$ 29.40	$ 31.17	$ 1.77	6 %
Arlington	49.95	47.98	-1.97	-4
Ashland	45.79	45.51	-.28	-1
Bedford	35.58	37.76	2.18	6
Bellingham	38.72	34.89	-3.83	-10
Belmont	37.61	37.69	.08	0
Beverly	43.83	43.80	-.03	0
Bolton	24.42	25.68	1.26	5
Boston	113.87	114.73	.86	1
Boxborough	28.50	29.22	.72	3
Braintree	42.56	42.18	-.38	-1
Brookline	61.83	61.00	-.83	-1
Burlington	42.57	41.19	-1.38	-3
Cambridge	70.24	78.28	8.04	11
Canton	41.95	41.53	-.42	-1
Carlisle	27.00	28.15	1.15	4
Chelsea	108.17	102.43	-5.74	-5
Cohasset	33.09	34.43	.11	0
Concord	34.48	33.20	-.05	0
Danvers	36.97	35.48	-1.49	-4
Dedham	38.18	40.35	2.17	6
Dover	22.98	25.43	2.45	11
Duxbury	38.40	38.83	.43	1
Essex	27.88	26.38	-1.50	-5
Everett	39.46	42.71	3.25	8
Foxborough	35.06	36.57	1.51	4
Framingham	42.71	42.89	.18	0
Franklin	44.53	45.77	1.24	3
Gloucester	44.62	43.04	-1.58	-4
Hamilton	27.17	27.91	.74	3
Hanover	35.70	40.02	4.32	12
Hingham	36.59	38.08	1.49	4
Holbrook	40.47	43.47	3.00	7
Holliston	38.50	39.47	.97	3
Hopkinton	30.01	30.19	.18	1
Hudson	46.82	43.85	-2.97	-6
Hull	62.90	60.57	-2.33	-4
Ipswich	38.41	35.43	-2.98	-8
Lexington	35.61	35.26	-.35	-1
Lincoln	25.48	23.86	-1.62	-6
Littleton	32.80	34.41	1.61	5
Lynn	81.39	80.86	-.53	-1
Lynnfield	27.62	24.56	-3.06	-11
Malden	58.71	56.35	-2.36	-4
Manchester	27.78	26.75	-1.03	-4
Marblehead	28.68	28.81	.13	1
Marlborough	45.70	44.19	-1.51	-3
Marshfield	40.67	38.98	-1.69	-4
Maynard	43.38	43.19	-.19	0
Medfield	40.12	39.22	-.90	-2
Medford	$ 51.88	$ 48.92	$ -2.96	-6 %
Medway	38.00	40.31	2.31	6
Melrose	45.36	48.97	3.61	8
Middleton	32.70	33.78	1.08	3
Milford	40.69	39.88	.81	-2
Millis	48.41	41.65	-6.76	-14
Milton	39.74	40.06	.32	1
Nahant	33.18	35.58	2.40	7
Natick	38.88	41.60	2.72	7
Needham	32.29	33.05	.76	2
Newton	50.82	51.21	.39	1
Norfolk	34.33	32.73	-1.60	-5
N. Reading	37.70	35.48	-2.22	-6
Norwell	43.12	41.69	-1.43	-3
Norwood	35.88	36.52	.64	2
Peabody	43.99	48.71	4.72	11
Pembroke	45.39	42.95	-2.44	-5
Quincy	42.08	64.01	21.93	52
Randolph	43.41	41.99	-1.42	-3
Reading	40.74	35.76	-4.98	-12
Revere	72.43	65.00	-7.43	-10
Rockland	47.28	46.92	-.36	-1
Rockport	19.60	22.28	2.68	14
Salem	51.27	50.74	-.53	-1
Saugus	38.91	36.93	-1.98	-5
Scituate	42.84	41.13	-1.71	-4
Sharon	41.50	42.69	1.19	3
Sherborn	37.60	37.20	-.40	-1
Somerville	72.10	66.14	-5.96	-8
Southborough	28.00	31.59	3.59	13
Stoneham	41.08	38.90	-2.18	-5
Stoughton	35.96	38.83	2.87	8
Stow	38.42	35.62	-2.80	-7
Sudbury	35.93	36.28	.35	1
Swampscott	45.15	43.79	-1.36	-3
Topsfield	26.27	28.33	2.06	8
Wakefield	44.78	44.29	-.49	-1
Walpole	39.45	39.34	-.11	0
Waltham	42.56	42.17	-.39	-1
Watertown	53.78	52.78	-1.00	-2
Wayland	38.29	38.42	.13	0
Wellesley	32.79	33.43	.64	2
Wenham	25.50	26.73	1.23	5
Weston	31.70	31.88	.18	1
Westwood	34.93	35.80	.87	3
Weymouth	49.97	47.07	-2.90	-6
Wilmington	43.22	42.17	-1.05	-2
Winchester	41.75	57.77	16.02	4
Winthrop	38.38	36.43	-1.95	-5
Woburn	44.60	41.96	-2.64	-6
Wrentham	33.72	38.04	.72	2

Sources: Massachusetts Taxpayers Foundation, 1979.
Metropolitan Area Planning Council, 1980.

TABLE 6
A COMPARISON OF RECENT TRENDS, 1979 TO 1980
(PERCENTAGES)

Community	Municipal Expenditures	State Aid	Full Value Tax Rate
Acton	0 %	11 %	6 %
Arlington	0	20	-4
Ashland	-1	9	-1
Bedford	-1	13	6
Bellingham	8	25	10
Belmont	2	26	0
Beverly	2	16	0
Bolton	5	9	5
Boston	0	12	1
Boxborough	8	16	3
Braintree	3	15	-1
Brookline	3	11	-1
Burlington	4	24	-3
Cambridge	6	17	11
Canton	2	14	-1
Carlisle	4	47	4
Chelsea	5	55	-5
Cohasset	0	28	0
Concord	5	9	0
Danvers	3	11	-4
Dedham	4	14	6
Dover	6	-2	11
Duxbury	3	6	1
Essex	13	18	-5
Everett	3	12	8
Foxborough	7	9	4
Framingham	3	11	0
Franklin	3	19	3
Gloucester	6	15	-4
Hamilton	-4	-1	3
Hanover	-2	10	12
Hingham	7	12	4
Holbrook	6	8	7
Holliston	6	10	3
Hopkinton	5	23	1
Hudson	-3	10	-6
Hull	25	10	-4
Ipswich	-4	13	-8
Lexington	1	11	-1
Lincoln	-3	11	-6
Littleton	5	15	5
Lynn	7	31	-1
Lynnfield	0	11	-11
Malden	1	13	-4
Manchester	5	11	-4
Marblehead	4	-4	1
Marlborough	1	9	-3
Marshfield	3	13	-4
Maynard	-1	23	0
Medfield	2	19	-2
Medford	5 %	24 %	-6 %
Medway	14	17	6
Melrose	3	-1	8
Middleton	-4	13	3
Milford	3	15	-2
Millis	-4	28	-14
Milton	2	24	1
Nahant	9	26	7
Natick	11	15	7
Needham	6	7	2
Newton	4	13	1
Norfolk	0	9	-5
N. Reading	4	11	-6
Norwell	3	8	-3
Norwood	7	15	2
Peabody	5	44	11
Pembroke	-8	10	-5
Quincy	5	47	52
Randolph	5	15	-3
Reading	2	12	-12
Revere	3	48	-10
Rockland	6	16	-1
Rockport	3	17	14
Salem	9	11	-1
Saugus	-1	10	-5
Scituate	3	11	-4
Sharon	5	13	3
Sherborn	1	26	-1
Somerville	2	29	-8
Southborough	1	7	13
Stoneham	0	16	-5
Stoughton	3	22	8
Stow	4	52	-7
Sudbury	-3	11	1
Swampscott	3	30	-3
Topsfield	0	13	8
Wakefield	0	-3	-1
Walpole	2	25	0
Waltham	4	24	-1
Watertown	6	61	-2
Wayland	3	20	0
Wellesley	-1	14	2
Wenham	-5	1	5
Weston	3	13	1
Westwood	6	10	3
Weymouth	-3	14	-6
Wilmington	4	10	-2
Winchester	3	20	4
Winthrop	2	10	-5
Woburn	5	12	-6
Wrentham	4	7	2

Source: Metropolitan Area Planning Council, 1980.

Reductions in tax rates appear to be attributable to increases in aid; increases in tax rates appear to be attributable to decreases in aid. Therefore, if reductions in tax rates are desired, aid must be increased; if aid is decreased, tax rates can be expected to increase. These statements are not entirely accurate.

First, communities which experienced decreases in tax rates also were the recipients of increases in state aid, although not all communities receiving more aid in 1980 reduced their tax rates. In fact, only 48 percent reduced their tax rates. An additional eight percent maintained their rates at 1979 levels. Therefore, if state aid is increased with the intent of reducing tax rates, the success rate could be expected to be around 50 percent.

Secondly, four of the five communities who received less aid in 1980 than they did in 1979, increased their tax rates during the same period. There is some correlation but the number of communities involved is too small to make a specific estimate (an estimate like 80 percent). It is possible, however, to say that if aid is decreased, the majority of communities will experience an increase in their tax rates.

The fact that only 48 percent of the communities who received more aid in 1980 than in 1979 reduced their tax rates and the fact that one of the five communities who received less aid in 1980 reduced its tax rate indicate that there are other significant factors influencing the setting of the tax rate. Expenditures could be one of them. Its significance, however, isn't apparent in Table 6. Other sources of revenue could be another factor. The property tax levy and state aid are not the only two sources of revenue for financing expenditures. Some communities who received increases in aid in 1980 might also have received less revenue from other sources than they did in 1979. This could have required them to raise the tax rate to compensate for the overall losses in revenue.

On a whole, the great majority of communities in the region either held their tax rates to a minimal increase or decreased them. The majority of communities also held their expenditures down in 1980. Some even reduced them. These trends were influenced, no doubt, by the four percent cap enacted by the Legislature and the governor at the end of 1979. The fact that state aid was increased in 1980 also cannot be overlooked, especially since increases to many communities were considerable.

INDICATORS OF NEED AND WEALTH

The purpose of state aid is to help residents finance their municipal services. These services in and of themselves exist to meet the needs of the residents. The needs of a community in terms of services and state aid, therefore, depend on the size and characteristics of the population. Population statistics are used in most state aid distribution formulas.

The 1975 State Census is used as the source of total population estimates for each city and town in Massachusetts. The statistics in it are the most recent and they will be used until the 1980 U.S. Census is published. Table 7 shows the 1975 estimates. In addition, projections for 1980 have been included, together with the projected changes in total population from 1975 to 1980.

According to the 1975 State Census, 52 percent of the state's 5,789,478 people reside in cities and towns in the MAPC region. The population of the region is estimated at 3,014,239. Boston is the largest community with 638,000 people, followed by Cambridge with 102,000, Quincy with 91,000, Newton with 89,000, Somerville with 81,000 and Lynn with 80,000. At the other end of the spectrum are Bolton with 2,400, Boxborough with 2,600 and Essex with 2,900.

Not all communities are projected to have the same percent change in population in 1980. The population of some communities is expected to increase while others are expected to experience decreases. Framingham is projected to increase by 13,000 (+21 percent) while Boston is estimated to lose 18,000 (-3 percent). The average change is expected to be about six percent. Changes such as these could result in a change in the relative distribution of state aid among the communities of the region. However, the shift in distributions might not be that great overall. The reason for this is that total population estimates are not used in all formulas.

Many of the larger aid programs, because they relate to education, use statistics of school populations. These estimates are revised each year (instead of remaining the same from 1975 to 1980) based on enrollment figures for the previous year. Therefore, the publication of the 1980 U.S. Census will have little if any effect on reimbursements and distributions to cities, towns and regional school districts for education. Since education aid constituted 74 percent of all aid to municipalities in 1980, the 1980 Census shouldn't alter the relative distribution of total aid among the cities and towns in the region.

Pupil population estimates for 1980 are exhibited in Table 8. Both actual and "weighted" estimates are presented. The actual statistic is the true number of physical bodies enrolled in public schools. It includes not only those residents enrolled locally, but also regionally in academic, vocational and agricultural school systems. The "weighted membership" statistic is the actual number of pupils modified to account for the time and cost of the various curricula to which they belong.

TABLE 7
POPULATION ESTIMATES, 1975 AND 1980

Community	1975 (State Census)	1980 (CTPS Projection)	1975 - 1980 Change	
			Number	Percent
Acton	18,209	20,800	2,591	14
Arlington	50,223	48,800	-1,423	-3
Ashland	8,906	9,500	594	7
Bedford	12,314	12,500	186	2
Bellingham	14,461	15,500	1,039	7
Belmont	27,660	27,600	-60	0
Beverly	37,382	40,500	3,118	8
Bolton	2,427	2,800	373	15
Boston	637,986	619,900	-18,086	-3
Boxborough	2,642	2,950	308	12
Braintree	36,822	38,750	1,928	5
Brookline	53,150	61,800	8,650	16
Burlington	24,306	25,900	1,594	7
Cambridge	102,095	104,000	1,905	2
Canton	18,114	19,000	886	5
Carlisle	3,178	3,400	222	7
Chelsea	25,066	23,500	-1,566	-6
Cohasset	7,785	8,300	515	7
Concord	17,270	19,100	1,830	11
Danvers	25,007	25,300	293	1
Dedham	26,924	27,600	676	3
Dover	4,923	6,300	1,377	28
Duxbury	10,601	12,400	1,799	17
Essex	2,872	3,100	228	8
Everett	39,713	38,700	-1,013	-3
Foxborough	14,690	17,300	2,610	18
Framingham	65,564	79,000	13,436	21
Franklin	18,379	20,000	1,621	9
Gloucester	27,209	27,200	-9	0
Hamilton	6,675	6,900	225	3
Hanover	10,533	11,000	467	4
Hingham	19,544	21,500	1,956	10
Holbrook	11,849	12,600	751	6
Holliston	12,921	14,500	1,579	12
Hopkinton	6,450	6,200	-250	-4
Hudson	16,827	17,500	673	4
Hull	10,572	10,800	228	2
Ipswich	11,551	12,800	1,249	11
Lexington	32,477	34,300	1,823	6
Lincoln	6,374	6,400	26	0
Littleton	6,629	7,200	571	9
Lynn	80,240	78,700	-1,540	-2
Lynnfield	12,009	12,900	891	7
Malden	55,814	54,300	-1,514	-3
Manchester	5,542	5,800	258	5
Marblehead	21,574	22,200	626	3
Marlborough	30,249	32,800	2,551	8
Marshfield	19,450	23,700	4,250	22
Maynard	9,901	10,100	199	2
Medfield	10,031	10,000	-31	0
Medford	60,702	60,000	-702	-1
Medway	8,166	9,100	934	11
Melrose	32,213	34,800	3,587	11
Middleton	4,032	5,100	1,068	27
Milford	23,366	25,000	1,634	7
Millis	6,534	7,500	966	15
Milton	27,214	27,900	686	3
Nahant	4,229	4,500	271	6
Natick	31,102	31,800	698	2
Needham	29,936	30,300	364	1
Newton	89,183	89,800	617	1
Norfolk	5,960	6,500	540	9
N. Reading	12,125	12,300	175	1
Norwell	8,999	9,500	501	6
Norwood	31,316	32,800	1,484	5
Peabody	45,503	45,600	97	0
Pembroke	12,374	11,700	-674	-5
Quincy	91,487	94,200	2,713	3
Randolph	29,206	31,000	794	3
Reading	23,696	26,000	2,304	10
Revere	41,292	41,400	108	0
Rockland	17,028	18,000	972	6
Rockport	6,284	7,000	716	11
Salem	38,545	41,800	3,255	8
Saugus	24,716	25,300	584	2
Scituate	17,829	19,000	1,171	7
Sharon	13,592	16,000	2,408	18
Sherborn	4,116	4,500	384	9
Somerville	80,596	80,800	204	0
Southborough	6,326	5,800	-526	-8
Stoneham	21,564	23,200	1,636	8
Stoughton	25,717	28,000	2,283	9
Stow	4,688	5,000	312	7
Sudbury	14,951	18,500	3,549	24
Swampscott	14,329	14,900	571	4
Topsfield	5,913	7,000	1,087	18
Wakefield	26,041	28,500	2,459	9
Walpole	18,504	18,800	296	2
Waltham	56,757	56,500	-257	-1
Watertown	36,075	35,200	-875	-2
Wayland	13,282	15,000	1,718	13
Wellesley	26,593	27,800	1,207	5
Wenham	3,359	3,500	141	4
Weston	11,478	12,500	1,022	9
Westwood	14,019	14,800	781	6
Weymouth	56,854	59,700	2,846	5
Wilmington	17,656	18,700	1,044	6
Winchester	22,672	23,800	1,128	5
Winthrop	20,359	20,800	441	2
Woburn	35,329	35,400	71	0
Wrentham	7,342	8,200	858	12

Sources: Office of the Secretary of Massachusetts, 1976.
Central Transportation Planning Staff, 1979.

TABLE 8
PUPIL POPULATION ESTIMATES, 1980

Community	Actual	"Weighted" *
Acton	4,836	5,198
Arlington	9,105	10,009
Ashland	2,445	2,570
Bedford	2,376	3,413
Bellingham	4,600	4,613
Belmont	4,402	4,814
Beverly	7,717	9,908
Bolton	671	658
Boston	108,345	94,326
Boxborough	608	666
Braintree	8,819	9,509
Brookline	5,618	5,855
Burlington	7,020	7,622
Cambridge	10,767	10,511
Canton	4,309	4,571
Carlisle	801	878
Chelsea	6,044	6,132
Cohasset	1,791	1,964
Concord	3,887	4,523
Danvers	5,387	5,607
Dedham	5,742	6,188
Dover	1,081	1,154
Duxbury	3,211	3,330
Essex	537	616
Everett	8,538	7,271
Foxborough	3,663	3,753
Framingham	14,807	15,575
Franklin	4,822	5,034
Gloucester	5,540	6,155
Hamilton	1,547	1,661
Hanover	3,465	3,989
Hingham	5,065	5,171
Holbrook	3,412	3,510
Holliston	3,877	3,953
Hopkinton	2,940	2,005
Hudson	4,103	4,846
Hull	3,229	2,903
Ipswich	2,497	2,626
Lexington	7,277	7,922
Lincoln	916	1,047
Littleton	1,837	1,913
Lynn	19,802	18,873
Lynnfield	2,965	3,169
Malden	10,708	10,597
Manchester	1,247	1,318
Marblehead	4,230	4,381
Marlborough	6,916	7,301
Marshfield	5,917	5,971
Maynard	2,317	2,578
Medfield	2,728	2,794
Medford	9,836	11,110
Medway	2,717	2,634
Melrose	6,272	6,611
Middleton	571	562
Milford	5,699	5,684
Millis	1,832	1,799
Milton	4,143	4,390
Nahant	690	752
Natick	7,330	7,532
Needham	6,221	6,580
Newton	14,668	15,657
Norfolk	1,630	1,762
N. Reading	3,169	3,340
Norwell	2,539	2,596
Norwood	6,549	7,505
Peabody	12,244	11,563
Pembroke	4,287	4,257
Quincy	15,952	16,149
Randolph	7,744	7,957
Reading	5,873	6,095
Revere	8,302	8,592
Rockland	3,764	3,689
Rockport	1,094	1,110
Salem	6,550	7,665
Saugus	5,836	6,552
Scituate	4,863	4,912
Sharon	3,405	3,658
Sherborn	1,138	1,208
Somerville	14,552	13,270
Southborough	1,749	1,899
Stoneham	5,007	4,747
Stoughton	6,572	6,446
Stow	1,428	1,572
Sudbury	4,257	4,580
Swampscott	2,951	3,038
Topsfield	827	845
Wakefield	5,243	5,671
Walpole	4,308	4,498
Waltham	11,148	11,189
Watertown	6,193	6,444
Wayland	3,242	3,473
Wellesley	4,906	5,359
Wenham	723	783
Weston	2,379	2,611
Westwood	3,251	3,622
Weymouth	13,577	14,408
Wilmington	5,566	5,609
Winchester	4,775	5,426
Winthrop	3,636	3,804
Woburn	8,912	8,683
Wrentham	1,773	1,970

* Modification of "Actual" figure by the Massachusetts Department of Education. See text for explanation.

Sources: Massachusetts Department of Education, 1980.

Pupils can be classified according to the type of program in which they participate. Different curricula require different commitments of the school system's time and money. Therefore, the State Department of Education has developed the following system to account for these variations:

Pre-Kindergarden and Kindergarden Programs	Pupil Weight	Full Time Programs	Pupil Weight
Regular Day	.5	Regular Day	1.0
Bilingual	.7	Special Needs	4.0
Low Income	.1	Special Residential	6.3
		Bilingual	1.4
		Occupational	2.0
		Low Income	.2

For the MAPC region as a whole, the "weighted" enrollment varies only slightly (less than one percent) from the actual enrollment. The actual enrollment is 615,822 and the weighted is 621,988. The variation for many individual communities, however, is more significant. The weighted membership for Beverly is 2,200 pupils (28 percent) higher than the actual. Boston, on the other hand, had a weighted membership 14,000 pupils (13 percent) lower than its actual pupil membership.

Boston has the largest weighted pupil population, 94,000. The second largest pupil population is 19,000 in Lynn. Lynn is followed by a dozen other communities with memberships of 10,000 or more. Eight communities have weighted populations of less than 900, the smallest being in Middleton (562).

Both weighted pupil population estimates and estimates of the total population of communities are used in state aid distribution formulas. They are often used with equalized assessed valuations of property as indicators of local wealth. Equalized assessed valuation per capita and equalized assessed valuation per (weighted) pupil are how they appear in formulas.

In 1978, equalized assessed property valuations for all the cities and towns in the state were set by the Department of Revenue. These figures are useful not only for allocating state aid, but for calculating full value tax rates. The 1978 valuations will be used in the allocation of aid through the fiscal year of 1981.

The total valuation of property in the MAPC region is $35,645,196,000. Boston has the highest valuation with $3.8 billion in property followed by Newton with $1.3 billion. Boxborough, Essex and Bolton have the lowest valuations with from $48,000 to $51,000, respectively.

Communities have different numbers of people, and as a result, different needs in terms of municipal services. Comparisons of wealth among cities and towns have more meaning if they are made in relation to the number of people in them, Therefore, comparisons of property valuation are better done in terms of total population and weighted pupil population. This is what is done by the state when it allocates aid, and this is what is done here in this report when comparing wealth among communities in the MAPC region. Table 9 shows these statistics.

The mean per capita equalized assessed valuation of the region is $15,273. The communities with the highest are Dover, Weston, Rockport, Manchester and Carlisle. They range from $31,000 in Dover to $24,000 in Carlisle. The communities with the lowest per capita valuations are Chelsea, Boston, Somerville and Lynn. Chelsea's is $5,400. The other three are less than $7,000.

The mean per pupil valuation for the region is $65,420. Ten communities have per pupil valuations which exceed $100,000. Rockport tops the list at $148,000, followed by Lincoln at $140,000, Dover at $133,000 and Topsfield at $130,000. Rockport, Dover, Weston and Manchester all had exceptionally high per pupil and per capita equalized assessed valuations. Chelsea, Bellingham and Lynn each had very low per pupil valuations (less than $30,000). These three also had low per capita valuations.

Another indicator of wealth is income. The income of local residents is generally presented in two ways--median family income and per capita income. These figures are usually determined by the U.S. Bureau of the Census in its decennial survey of the population. The last census was in 1970. In 1977, the Bureau of the Census updated per capita income statistics by estimating 1975 per capita income. This statistic is shown in Table 9.

The mean per capita income for the MAPC region is $5,717. Dover and Weston far exceed the mean with per capita incomes of over $10,000. Wellesley and Brookline follow with per capita incomes of about $8,000. Again, Dover and Weston appear as very wealthy communities. Wellesley with a high per capita income also had a very high per pupil equalized assessed valuation and a higher than average per capita valuation.

Wrentham has the lowest per capita income at $3,900. It was also below average in terms of the other two indicators of wealth--per capita valuation and per pupil valuation. Bellingham, Chelsea, Franklin, Norfolk, Rockland and Wilmington are the least wealthy communities in terms of per capita valuations and very low per pupil valuations. Norfolk has a lower than average per capita valuation and a lower than average per pupil valuation. Wilmington has a lower than average per pupil valuation, but an average per capita valuation.

Municipal expenditures could be considered an indicator of wealth as well as an indicator of need. All communities need to provide certain basic services. There are standards for the quality of these services. Wealthier communities have more resources to spend and can afford to provide these as well as additional increments of services. State aid should not be used to finance these additional increments. Therefore, the mean level of expenditures per capita and per pupil could be used to define the "base" level of expenditures. Then it could be assumed that those communities below that "base" level should receive more aid in order to assist them in providing a minimum level of services.

TABLE 9
INDICATORS OF WEALTH

Community	1975 Per Capita Income	1978 Equalized Assessed Valuation Total ($000)	Per Capita*	Per Pupil**
Acton	$ 6,365	$ 338,800	$ 18,606	$ 65,179
Arlington	5,903	611,500	12,176	61,095
Ashland	4,867	123,900	14,566	48,210
Bedford	5,423	260,500	21,155	76,326
Bellingham	4,127	122,900	8,499	26,642
Belmont	7,396	467,100	16,887	97,029
Beverly	5,238	461,600	12,348	46,589
Bolton	5,526	50,950	20,993	77,432
Boston	4,503	3,831,000	6,005	40,614
Boxborough	5,629	47,910	18,134	71,937
Braintree	5,357	577,200	15,675	60,700
Brookline	8,117	734,300	13,816	125,414
Burlington	4,808	455,300	18,732	59,735
Cambridge	5,617	917,000	8,982	87,242
Canton	5,649	277,100	15,298	60,621
Carlisle	7,681	76,820	24,172	87,494
Chelsea	4,137	136,300	5,438	22,228
Cohasset	7,296	149,600	19,216	76,171
Concord	7,807	379,300	21,963	83,860
Danvers	4,945	423,400	16,931	75,513
Dedham	5,549	397,200	14,753	64,189
Dover	10,381	153,900	31,261	133,362
Duxbury	6,256	220,800	20,828	66,306
Essex	5,441	50,360	17,535	81,753
Everett	4,672	709,700	17,871	97,607
Foxborough	4,776	193,800	13,193	51,639
Framingham	5,766	903,800	13,785	58,029
Franklin	4,248	185,700	10,104	36,889
Gloucester	4,990	382,400	14,054	62,128
Hamilton	5,875	117,400	17,588	70,680
Hanover	4,887	164,900	15,656	41,339
Hingham	6,336	348,000	17,806	67,298
Holbrook	4,503	129,900	10,963	37,009
Holliston	5,372	179,900	13,923	45,510
Hopkinton	5,131	111,600	17,302	55,661
Hudson	4,573	169,700	10,085	35,019
Hull	4,583	112,100	10,603	38,615
Ipswich	4,970	156,800	13,575	59,711
Lexington	7,082	666,900	20,535	84,183
Lincoln	7,424	146,200	22,937	139,637
Littleton	5,187	103,200	15,568	53,947
Lynn	4,647	559,000	6,967	29,619
Lynnfield	6,891	253,500	21,109	79,994
Malden	4,803	444,900	7,971	41,984
Manchester	6,130	141,200	25,478	107,132
Marblehead	7,847	467,900	21,688	106,802
Marlborough	4,778	342,000	11,306	46,843
Marshfield	5,240	306,700	15,769	51,365
Maynard	4,772	125,900	12,716	48,836
Medfield	6,043	147,400	14,694	52,756
Medford	$ 4,867	$ 585,900	$ 9,652	$ 52,736
Medway	4,502	121,400	14,867	46,090
Melrose	5,408	339,000	10,524	51,278
Middleton	4,495	67,570	16,758	120,231
Milford	4,540	227,500	9,736	40,025
Millis	5,412	83,440	12,770	46,381
Milton	6,979	380,000	13,963	86,560
Nahant	6,596	62,480	14,774	83,085
Natick	5,652	479,500	15,417	63,662
Needham	7,268	579,446	19,356	88,062
Newton	7,554	1,345,000	15,081	85,904
Norfolk	4,358	76,790	12,884	43,581
N. Reading	4,918	168,900	13,930	50,569
Norwell	5,984	140,600	15,624	54,160
Norwood	5,558	422,900	13,504	56,349
Peabody	5,002	564,000	12,395	48,776
Pembroke	4,811	144,300	11,662	33,897
Quincy	5,318	975,500	10,663	60,406
Randolph	4,989	318,000	10,888	39,965
Reading	5,755	324,400	13,690	53,224
Revere	4,739	349,300	8,459	40,654
Rockland	4,026	144,300	8,474	39,116
Rockport	5,971	164,100	26,114	147,838
Salem	4,585	477,500	12,388	62,296
Saugus	4,913	366,100	14,812	55,876
Scituate	5,472	277,200	15,548	56,433
Sharon	6,354	206,500	15,193	56,451
Sherborn	7,349	94,120	22,867	77,914
Somerville	4,479	518,000	6,427	39,035
Southborough	5,851	126,600	20,013	66,667
Stoneham	5,545	301,800	13,996	63,577
Stoughton	4,878	326,800	12,708	50,698
Stow	5,849	80,600	17,193	51,272
Sudbury	6,742	294,400	19,691	64,279
Swampscott	7,152	223,200	15,577	73,469
Topsfield	6,298	109,700	18,552	129,822
Wakefield	5,550	330,700	12,699	58,314
Walpole	5,336	267,900	14,478	59,560
Waltham	4,906	810,000	14,271	72,393
Watertown	5,490	417,000	11,559	64,711
Wayland	7,307	259,600	19,545	74,748
Wellesley	8,202	608,900	22,897	113,621
Wenham	7,333	68,590	20,420	87,599
Weston	10,261	316,400	27,566	121,180
Westwood	7,342	296,700	21,164	81,916
Weymouth	5,072	626,200	10,995	43,462
Wilmington	4,308	280,500	15,887	50,009
Winchester	7,675	268,400	11,838	49,466
Winthrop	5,198	181,800	8,930	47,792
Woburn	4,824	520,700	14,739	59,968
Wrentham	3,860	89,720	12,220	45,543

* 1975 population estimates used.
** "Weighted" pupil estimates used.

Sources: U.S. Bureau of the Census, 1979.
Massachusetts Department of Revenue, 1980.
Office of the Secretary of Massachusetts, 1980.
Massachusetts Department of Education, 1980.

There are some problems with this rationale. First, many smaller municipalities have part-time or very small full-time governments, not because they cannot afford full-time staffs, but because they just don't need them. Larger communities need larger administrative and planning staffs to effectively organize and supervise services. Therefore, per capita and per pupil expenditures will tend to increase with community size. This increase is difficult to separate from the "additional increments of services" state aid shouldn't finance. Secondly, the condition of schools, libraries, community facilities, roads, sewers, water systems, police and fire equipment, etc. all vary from community to community. Those communities with older infrastructure spend more on maintenance and replacement than others. These "needed" expenditures are also difficult to separate from those additional increments of services which state aid shouldn't finance. Finally, there is a third dilemma. Should more state aid be directed to those communities who are spending less than the "basic" or average level for services in order to bring them up to this generally acceptable level, or, should more aid be directed to those communities who have the highest level of expenditures to help them with the burden of higher capital improvement costs? Whatever the answer, municipal expenditures are presented in Table 10, and used in a comparison of wealth/need and aid in the following chapter. Interpretation of this indicator with respect to the distribution of aid will be left to the reader.

Table 10 is a presentation of total and per capita expenditures for all services and per pupil expenditures for education. The mean per capita expenditure for communities in the MAPC region in 1980 is $928. Seven communities have per capita expenditures well above the mean. Danvers is the highest with a $1,400 expenditure followed by Hull and Middleton with $1,300 expenditures and Weston, Cambridge, Boston and Quincy with $1,200 expenditures. Brookline, Burlington, Duxbury, Needham, Salem and Wellesley also have per capita expenditures significantly above the average. There are just as many communities who have per capita expenditures significantly below average. These 13 include Bellingham, Hamilton, Hudson, Milton, Nahant, Norfolk, Pembroke, Somerville, Stoughton, Topsfield, Wenham, Winthrop and Wrentham. Their expenditures range from a high of $769 in Pembroke to a low of $641 in Winthrop.

Per pupil expenditures for education were obtained from the State Department of Education. The most recent figures available are for the 1977-78 school year. They account for expenditures for local membership in regional schools. The average expenditure for the MAPC region is $1,954. Four communities stand out as being well above the mean with expenditures of $3,000 or more per pupil. They are Concord with $4,100, Brookline and Cambridge with $3,400 and Lincoln with $3,000. Boston, Needham, Swampscott, Wayland, Wellesley and Weston also spend significantly more than the mean for education. Eight communities spend less than $1,550 which is significantly below the mean. They are Bellingham, Franklin, Marlborough, Marshfield, Milford, Norfolk, Pembroke and Reading.

The per pupil expenditure figures presented in Table 10 are several years old. Since then many school systems have experienced declining enrollments. The Department of Education expects that these trends will cause per pupil expenses to increase. Since changes in enrollments vary

TABLE 10
MUNICIPAL EXPENDITURES

Community	1980 Total ($000) (All Services)	1980 Per Capita (All Services)*	1977-78 Per Pupil (Education)
Acton	$ 14,230	$ 781	$ 1,974
Arlington	41,839	833	2,005
Ashland	7,811	918	1,780
Bedford	13,055	1,060	1,781
Bellingham	10,652	737	1,301
Belmont	24,505	886	2,230
Beverly	31,228	835	1,760
Bolton	1,876	773	1,864
Boston	794,665	1,246	2,554
Boxborough	2,066	782	1,753
Braintree	38,816	1,054	1,823
Brookline	58,714	1,105	3,405
Burlington	27,001	1,111	1,778
Cambridge	127,344	1,247	3,369
Canton	17,097	944	1,928
Carlisle	3,204	1,008	2,305
Chelsea	23,915	954	1,943
Cohasset	7,411	952	1,991
Concord	17,404	1,008	4,075
Danvers	35,445	1,417	2,029
Dedham	21,770	809	1,765
Dover	5,065	1,029	2,131
Duxbury	13,152	1,241	1,773
Essex	2,429	846	1,741
Everett	38,314	965	1,990
Foxborough	12,277	836	1,867
Framingham	57,830	882	2,034
Franklin	15,092	821	1,521
Gloucester	25,412	934	1,804
Hamilton	4,349	652	1,946
Hanover	10,968	1,041	1,747
Hingham	18,787	961	1,772
Holbrook	9,286	784	1,899
Holliston	11,310	875	1,767
Hopkinton	5,311	823	1,873
Hudson	12,485	742	1,651
Hull	14,144	1,338	2,055
Ipswich	9,339	809	1,948
Lexington	33,092	1,019	2,331
Lincoln	5,611	880	3,032
Littleton	5,666	855	1,798
Lynn	78,322	976	1,691
Lynnfield	9,398	783	1,816
Malden	43,320	776	1,603
Manchester	5,440	982	1,988
Marblehead	21,078	977	1,898
Marlborough	23,976	793	1,505
Marshfield	18,918	973	1,496
Maynard	8,476	856	1,777
Medfield	9,064	904	1,768
Medford	$ 47,085	$ 776	$ 1,742
Medway	8,332	1,020	1,776
Melrose	25,460	790	1,769
Middleton	5,219	1,294	1,905
Milford	18,075	774	1,498
Millis	5,698	872	1,790
Milton	20,797	764	1,942
Nahant	3,240	766	1,963
Natick	29,196	939	1,944
Needham	34,662	1,158	2,085
Newton	93,194	1,045	2,347
Norfolk	4,208	706	1,522
N. Reading	10,107	834	1,773
Norwell	9,735	1,082	1,858
Norwood	36,392	1,162	2,030
Peabody	43,986	967	1,675
Pembroke	9,511	769	1,407
Quincy	112,780	1,233	2,181
Randolph	23,758	813	1,978
Reading	20,822	879	1,541
Revere	36,971	895	1,890
Rockland	13,233	777	1,688
Rockport	5,433	865	1,982
Salem	45,166	1,172	2,006
Saugus	20,655	836	1,718
Scituate	17,582	986	1,733
Sharon	13,047	960	1,904
Sherborn	4,360	1,059	2,275
Somerville	61,255	760	1,659
Southborough	5,886	930	1,829
Stoneham	17,192	797	1,823
Stoughton	19,502	758	1,578
Stow	4,194	895	1,663
Sudbury	13,907	930	2,022
Swampscott	13,926	972	2,448
Topsfield	4,495	760	1,844
Wakefield	22,663	870	1,888
Walpole	17,631	953	1,885
Waltham	51,789	912	2,137
Watertown	33,072	917	2,002
Wayland	14,319	1,078	2,540
Wellesley	29,148	1,096	2,580
Wenham	2,308	687	1,977
Weston	14,324	1,248	2,624
Westwood	14,603	1,042	2,161
Weymouth	47,274	830	1,710
Wilmington	17,736	1,005	1,942
Winchester	21,961	969	2,125
Winthrop	13,042	641	1,777
Woburn	31,621	895	1,805
Wrentham	5,433	740	1,731

* 1975 population estimates used.

Sources: Massachusetts Department of Revenue, 1980.
Massachusetts Department of Education, 1980.
Office of the Secretary of Massachusetts, 1976.

from community to community, their impact on the relationship of per pupil expenditures among communities in the MAPC region is unknown. The reader should keep this in mind when making the aforementioned decisions about the use of expenditures as an indicator of need and wealth.

A COMPARISON OF RECEIPTS

The allocation of state aid among cities and towns in the MAPC region is examined in this section. Table 11 shows the distribution of aid per person. Aid for education is separated from aid for other items. School aid per pupil and non-school aid per capita are used because it is easier and more logical to compare per person aid among communities of different sizes.

The mean school aid per pupil for the MAPC region is $582. Figures for individual communities range from a low of $305 to a high of $1,305. Fifteen communities received significantly more aid per pupil than the mean. Four of them received well above the mean. The four of these got more than $960 in school aid per pupil. More than $770 per pupil was distributed to the remaining 11 cities and towns. These 15 include (from highest to lowest reimbursement) Boston, Somerville, Lincoln, Lynn, Revere, Rockland, Chelsea, Malden, Cambridge, Winthrop, Pembroke, Bellingham, Stow, Milford and Norwell. Nine communities received distributions of school aid per pupil radically different from the 15 above. These nine were reimbursed $400 per pupil or less, well below the average school aid per pupil. Beginning with the community receiving the smallest reimbursement, they are Milton, Nahant, Marblehead, Needham, Rockport, Everett, Beverly, Manchester and Dedham.

Some of the same communities ended up on the high and the low ends of distributions of non-school aid per capita. The mean for the region is $42. Thirteen communities were significantly above that, and 11 significantly below. The high was Carlisle with $86, followed by Boston with $84, Chelsea with $77, Wrentham $73 and Norfolk $72. Bellingham, Ipswich, Lynn, Malden, Medfield, Revere, Rockland and Somerville were upwards of $50 and $60. The lowest reimbursement was $24 per capita to Marblehead. It was followed closely by Everett, Wellesley, Dover, Lexington, Manchester, Weston, Needham, Belmont, Cohasset and Winchester, in that order. Each recieved less than $30 per capita.

Bellingham, Boston, Chelsea, Lynn, Malden, Revere, Rockland, and Somerville received higher than average distributions in both school aid and non-school aid. Everett, Manchester, Marblehead and Needham were distributed less school aid per pupil and less non-school aid per capita than the averages of all communities in the MAPC region. These distributions of aid are compared to the aforementioned indicators of wealth and need in Tables 12 and 13.

One method of classifying statistics for comparison to one another is with the use of standard deviations from the mean. Mathematical formulas allow us to group a set of statistics in terms of whether they are higher or lower than the mean and by how much. Since the system grossly classifies these statistics, fairly accurate comparisons among sets of statistics can be made. This is what has been done for all the indicators of wealth and need and for the distributions of aid.

TABLE 11
STATE AID PER RESIDENT, 1980

Community	School Aid Per Pupil*	Non-School Aid Per Capita**
Acton	$ 535	$ 36
Arlington	497	38
Ashland	480	46
Bedford	455	43
Bellingham	790	59
Belmont	512	29
Beverly	380	41
Bolton	519	50
Boston	1,305	84
Boxborough	547	34
Braintree	443	31
Brookline	565	39
Burlington	500	30
Cambridge	872	50
Canton	514	41
Carlisle	485	86
Chelsea	910	77
Cohasset	463	29
Concord	543	41
Danvers	434	35
Dedham	400	35
Dover	593	26
Duxbury	521	36
Essex	461	45
Everett	379	25
Foxborough	595	48
Framingham	559	41
Franklin	715	50
Gloucester	609	45
Hamilton	579	39
Hanover	508	36
Hingham	462	32
Holbrook	588	43
Holliston	596	39
Hopkinton	435	53
Hudson	721	49
Hull	674	48
Ipswich	466	56
Lexington	516	26
Lincoln	984	40
Littleton	415	39
Lynn	961	65
Lynnfield	414	35
Malden	892	56
Manchester	387	26
Marblehead	342	24
Marlborough	722	47
Marshfield	456	38
Maynard	555	44
Medfield	593	59
Medford	$ 607	$ 51
Medway	712	40
Melrose	634	42
Middleton	452	48
Milford	777	53
Millis	588	48
Milton	305	35
Nahant	326	33
Natick	411	37
Needham	340	28
Newton	487	31
Norfolk	681	72
N. Reading	527	40
Norwell	771	36
Norwood	506	36
Peabody	594	43
Pembroke	796	48
Quincy	545	45
Randolph	672	44
Reading	464	38
Revere	927	55
Rockland	919	57
Rockport	342	30
Salem	528	48
Saugus	464	34
Scituate	541	36
Sharon	540	39
Sherborn	630	39
Somerville	1,112	63
Southborough	562	37
Stoneham	431	36
Stoughton	486	45
Stow	790	39
Sudbury	746	33
Swampscott	479	34
Topsfield	590	36
Wakefield	571	42
Walpole	723	39
Waltham	463	38
Watertown	519	41
Wayland	665	33
Wellesley	489	25
Wenham	576	33
Weston	612	26
Westwood	448	33
Weymouth	552	45
Wilmington	541	37
Winchester	452	29
Winthrop	831	47
Woburn	531	35
Wrentham	658	73

* "Weighted" pupil estimates used.
** 1975 Population estimates used.

Sources: Massachusetts Department of Revenue, 1980.
Massachusetts Department of Education, 1980.
Office of the Secretary of Massachusetts, 1976.

Table 12 is a comparison of wealth and need per pupil with school aid per pupil. Table 13 is a comparison of wealth and need per capita with non-school aid per capita. A minus means that the statistic was below the average. No sign means that it was above the average. Numerically, a '0' means that it was exactly average; a 1 means that it was roughly average (plus--slightly above, minus--slightly below average); a 2 means that it was significantly above or below the average (depending on the sign); and, a 3 or more means that it was well above or below the average (also depending on the sign).

Theoretically, if a community is on the plus side in the indicators of wealth and need they should be on the minus side of the mean with respect to aid, and roughly in the same numerical category. For example, in Table 13, Wellesley is in the second category above the mean in terms of per capita income, per capita equalized assessed property valuation and per capita expenditures. In theory and in actuality, it is in the second category below the mean (-2) in terms of the per capita non-school aid it received. If it is in one class higher or one lower, it is acceptable because where one class ends the next begins and two statistics could be only $1 or $2 different and end up in a different category. For example, Lynn's per capita non-school aid is $65. If it had been $2 more it would have been in the third class above the mean instead of in the second (see Table 12). The categories of 1 and -1 should be considered adjacent.

Interpretations of Tables 12 and 13 are complicated by the fact that there are three indicators of wealth and need--income, property valuation and expenditures, which don't always match each other. Some communities are property rich and income poor. Bedford, for example has a higher than average per capita valuation and a lower than average per capita income (see Table 13). Other communities are property poor and income rich. Milton has a below average per capita valuation but an above average per capita income (see Table 13). The reader must make the determination as to which is a better measure of wealth or need, which should be compared with the aid distributed. If both are important, the reader must decide their relative importance and determine how they should be combined, if need be, to compare them with the aid distributed.

With regard to expenditures, the same type of decision as to how it relates to the other two indicators must be made by the reader. These decisions should be made while keeping in mind the previously mentioned problems of using expenditures as an indicator. Those problems (discussed in Chapter 4) relate to the fact that both high and low expenditures could be an indication of need and the fact that high expenditures could also indicate wealth.

Table 12 compares per capita income, per pupil equalized assessed property valuation and per pupil expenditures with school aid. Approximately 40 percent of the communities in the region were significantly above or below the mean in per capita income and/or per pupil valuation. All three of those who were well above the mean in both received roughly average distributions of aid. These were the communities of Brookline, Dover and Weston. Lincoln is well above average in terms of per pupil valuation and

TABLE 12
WEALTH AND NEED PER PUPIL VERSUS DISBURSEMENTS FOR EDUCATION, 1980

Community	1975 Income	1978 Eq. Ass'd Val.	1977-78 Expend(Educ.)	1980 School Aid
Acton	1	-1	1	-1
Arlington	1	-1	1	-1
Ashland	-1	-1	-1	-1
Bedford	-1	1	-1	-1
Bellingham	-2	-2	-2	2
Belmont	2	2	1	-1
Beverly	-1	-1	-1	-2
Bolton	-1	1	-1	-1
Boston	-1	-1	2	5
Boxborough	-1	1	-1	-1
Braintree	-1	-1	-1	-1
Brookline	3	3	4	-1
Burlington	-1	-1	-1	-1
Cambridge	-1	1	4	2
Canton	-1	-1	-1	-1
Carlisle	2	1	1	-1
Chelsea	-2	-2	-1	2
Cohasset	2	1	1	-1
Concord	2	1	6	-1
Danvers	-1	1	1	-1
Dedham	-1	-1	-1	-2
Dover	4	3	1	1
Duxbury	1	1	-1	-1
Essex	-1	1	-1	-1
Everett	-1	2	1	-2
Foxborough	-1	-1	-1	1
Framingham	1	-1	1	-1
Franklin	-2	-2	-2	1
Gloucester	-1	-1	-1	1
Hamilton	1	1	-1	-1
Hanover	-1	-1	-1	-1
Hingham	1	1	-1	-1
Holbrook	-1	-2	-1	1
Holliston	-1	-1	-1	1
Hopkinton	-1	-1	-1	-1
Hudson	-1	-2	-1	1
Hull	-1	-2	1	1
Ipswich	-1	-1	-1	-1
Lexington	2	1	1	-1
Lincoln	2	3	3	3
Littleton	-1	-1	-1	-1
Lynn	-1	-2	-1	3
Lynnfield	1	1	-1	-1
Malden	-1	-1	-1	2
Manchester	1	2	1	-2
Marblehead	2	2	-1	-2
Marlborough	-1	-1	-2	1
Marshfield	-1	-1	-2	-1
Maynard	-1	-1	-1	-1
Medfield	1	-1	-1	1
Medford	-1	-1	-1	1
Medway	-1	-1	-1	1
Melrose	-1	-1	-1	1
Middleton	-1	3	-1	-1
Milford	-1	-1	-2	2
Millis	-1	-1	-1	1
Milton	2	1	-1	-2
Nahant	1	1	1	-2
Natick	-1	-1	-1	-1
Needham	2	1	2	-2
Newton	2	1	1	-1
Norfolk	-2	-1	-2	1
N. Reading	-1	-1	-1	-1
Norwell	1	-1	-1	2
Norwood	-1	-1	1	-1
Peabody	-1	-1	-1	1
Pembroke	-1	-2	-2	2
Quincy	-1	-1	1	-1
Randolph	-1	-1	1	1
Reading	1	-1	-2	-1
Revere	-1	-1	-1	2
Rockland	-2	-2	-1	2
Rockport	1	4	1	-2
Salem	-1	-1	1	-1
Saugus	-1	-1	-1	-1
Scituate	-1	-1	-1	-1
Sharon	1	-1	-1	-1
Sherborn	2	1	1	1
Somerville	-1	-2	-1	4
Southborough	1	1	-1	-1
Stoneham	-1	-1	-1	-1
Stoughton	-1	-1	-1	-1
Stow	1	-1	-1	2
Sudbury	1	-1	1	1
Swampscott	2	1	2	-1
Topsfield	1	3	-1	1
Wakefield	-1	-1	-1	-1
Walpole	-1	-1	-1	1
Waltham	-1	1	1	-1
Watertown	-1	-1	1	-1
Wayland	2	1	2	1
Wellesley	2	2	2	-1
Wenham	2	1	1	-1
Weston	4	3	2	1
Westwood	2	1	1	-1
Weymouth	-1	-1	-1	-1
Wilmington	-2	-1	-1	-1
Winchester	2	-1	1	-1
Winthrop	-1	-1	-1	2
Woburn	-1	-1	-1	-1
Wrentham	-2	-1	-1	1

Source: Metropolitan Area Planning Council, 1980.

TABLE 13
WEALTH AND NEED PER CAPITA VERSUS DISBURSEMENTS FOR NON-EDUCATION ITEMS, 1980

Community	1975 Income	1978 Eq. Ass'd. Val.	1980 Expenditures	1980 Non-School Aid
Acton	1	1	-1	-1
Arlington	1	-1	-1	-1
Ashland	-1	-1	-1	1
Bedford	-1	2	1	1
Bellingham	-2	-2	-2	2
Belmont	2	1	-1	-2
Beverly	-1	-1	-1	-1
Bolton	-1	2	-1	1
Boston	-1	-2	3	4
Boxborough	-1	1	-1	-1
Braintree	-1	1	1	-1
Brookline	3	-1	2	-1
Burlington	-1	1	2	-1
Cambridge	-1	-2	3	1
Canton	-1	1	1	-1
Carlisle	2	2	1	4
Chelsea	-2	-3	1	3
Cohasset	2	1	1	-2
Concord	2	2	1	-1
Danvers	-1	1	4	-1
Dedham	-1	-1	-1	-1
Dover	4	4	1	-2
Duxbury	1	2	2	-1
Essex	-1	1	-1	1
Everett	-1	1	1	-2
Foxborough	-1	-1	-1	1
Framingham	1	-1	-1	-1
Franklin	-2	-2	-1	1
Gloucester	-1	-1	1	1
Hamilton	1	1	-2	-1
Hanover	-1	1	1	-1
Hingham	1	1	1	-1
Holbrook	-1	-1	-1	1
Holliston	-1	-1	-1	-1
Hopkinton	-1	1	-1	1
Hudson	-1	-2	-2	1
Hull	-1	-1	3	1
Ipswich	-1	-1	-1	2
Lexington	2	2	1	-2
Lincoln	2	2	-1	-1
Littleton	-1	1	-1	-1
Lynn	-1	-2	1	2
Lynnfield	1	2	-1	-1
Malden	-1	-2	-1	2
Manchester	1	3	1	-2
Marblehead	2	2	1	-2
Marlborough	-1	-1	-1	-1
Marshfield	-1	1	1	-1
Maynard	-1	-1	-1	1
Medfield	1	-1	-1	2
Medford	-1	-2	-1	1
Medway	-1	-1	1	-1
Melrose	-1	-1	-1	0
Middleton	-1	1	3	1
Milford	-1	-2	-1	1
Millis	-1	-1	-1	1
Milton	2	-1	-2	-1
Nahant	1	-1	-2	-1
Natick	-1	1	1	-1
Needham	2	1	2	-2
Newton	2	-1	1	-1
Norfolk	-2	-1	-2	3
N. Reading	-1	-1	-1	-1
Norwell	1	1	1	-1
Norwood	-1	-1	2	-1
Peabody	-1	-1	1	1
Pembroke	-1	-1	-2	1
Quincy	-1	-1	2	1
Randolph	-1	-1	-1	1
Reading	1	-1	-1	-1
Revere	-1	-2	-1	2
Rockland	-2	-2	-1	2
Rockport	1	3	-1	-1
Salem	-1	-1	2	1
Saugus	-1	-1	-1	-1
Scituate	-1	1	1	-1
Sharon	1	-1	1	-1
Sherborn	2	2	1	-1
Somerville	-1	-2	-2	2
Southborough	1	1	1	-1
Stoneham	-1	-1	-1	-1
Stoughton	-1	-1	-2	1
Stow	1	1	-1	-1
Sudbury	1	1	1	-1
Swampscott	2	1	1	-1
Topsfield	1	1	-2	-1
Wakefield	-1	-1	-1	0
Walpole	-1	-1	1	-1
Waltham	-1	-1	-1	-1
Watertown	-1	-1	-1	-1
Wayland	2	1	1	-1
Wellesley	2	2	2	-2
Wenham	2	2	-2	-1
Weston	4	3	3	-2
Westwood	2	2	1	-1
Weymouth	-1	-1	-1	1
Wilmington	-2	1	1	-1
Winchester	2	-1	1	-2
Winthrop	-1	-2	-2	1
Woburn	-1	-1	-1	-1
Wrentham	-2	-1	-2	3

Source: Metropolitan Area Planning Council, 1980.

significantly above average in per capita income. Its distribution of school aid per pupil was also well above average. This disparity from the desired distribution may or may not have something to do with the fact that Lincoln's per pupil expenditures are well above average. This is one case where the reader must make his/her own interpretation.

Three communities--Belmont, Marblehead and Wellesley--have significantly above average per capita incomes and per pupil valuations. Marblehead received significantly less than the average distribution of school aid per pupil while Belmont and Wellesley received roughly the average. Eighteen other communities were significantly above average in only one of the indicators--either per capita income or per pupil valuation. Manchester, Milton, Needham and Rockport received significantly below average distributions of aid while the remainder received roughly average.

Thirteen communities have significantly below average per capita incomes and/or per pupil valuations. Three of the four who are below in both--Bellingham, Chelsea and Rockland--received above average distributions of school aid. Franklin, the fourth, received an average distribution. Of the remaining nine who are above average in either one or the other indicator, Lynn and Somerville had school aid distributions which were well above the average and Pembroke had a school aid distribution significantly above average.

Comparisons similar to those above can be made between local wealth and the distribution of non-school aid. Table 13 is a presentation of the information. Forty one communities are significantly above or below average in per capita income and/or per capita equalized valuation. Six of the 25 which are above average received less than average distributions of per capita aid. They are Belmont, Dover, Lexington, Manchester, Marblehead and Needham. Three others--Carlisle, Wellesley and Weston--received above average distributions of non-school aid per capita. The question of need arises here, as it did with Lincoln and its above average distribution of school aid. The remainder of the 25 with above average per capita incomes and above average per capita valuations were distributed roughly average amounts of non-school aid per capita.

Ten of the 15 cities and towns with below average incomes and property values per capita were given significantly above average distributions of non-school aid. Four of these communities--Boston, Chelsea, Norfolk and Wrentham--had distributions well above the others. The five communities which were below average in one or both of the indicators of wealth, but who did not receive above average distributions of aid, did receive roughly average distributions. These were the communities of Franklin, Hudson, Medford, Milford and Wilmington.

Generally speaking, the majority of communities did receive distributions not extraordinarily different from their relative need. There seems to be evidence that the equity of several distributions should be examined more closely. The analysis in this chapter was very rough. A finer one might result in additional inequities. However, before that type of analysis can be done more exact definitions of wealth and need must be made. In addition, the precision with which equity can feasibly be achieved must be defined.

IMPACTS ON LOCAL FINANCES

Once again, the purpose of state aid is to assist local residents in financing their expenditures. The extent to which this goal is achieved is often questioned. Expenditures of all communities in the MAPC region exceed $3 billion. Twenty percent of these expenditures are financed with the $600 million in state aid which MAPC communities receive. Table 14 shows that percent of municipal expenditures financed by state aid in each community.

On the average, state aid accounts for 21 percent of municipal expenditures in the MAPC region. A number of communities fell significantly above or significantly below the average--Bellingham, Pembroke and Norfolk far exceeded the average with percentages of 42, 42, and 39, respectively. Ten other communities--Reading, Stow, Rockland, Milford, Somerville, Winthrop, Chelsea, Carlisle, Franklin and Lynn--also were significantly higher than the mean, with percentages of 30 or more. Twelve communities--Brookline, Danvers, Middleton, Needham, Everett, Marblehead, Rockport, Cambirdge, Milton, Quincy, Wellesley and Manchester--financed less than 13 percent of their expenditures with state aid, significantly lower than the mean.

Ten of the 13 communities identified as having percentages significantly higher than the mean were found to be below the mean in terms of the three indicators of wealth previously mentioned--per capita income, per capita equalized assessed and per pupil equalized assessed valuation. Four of these 10 communities are the aforementioned communities that have very low per capita incomes, per capita valuations and per pupil valuations. They are Bellingham, Chelsea, Franklin and Rockland. Carlisle, Reading and Stow were lower than average in at least one of the indicators of wealth and higher than average in the others (sometimes significantly higer--Carlisle has the fifth highest per capita valuation in the region).

Four of the 12 communities identified as having received significantly low distributions of aid in relation to expenditures were found to be above the mean in terms of all three indicators of wealth. Three of these communities--Rockport, Wellesley and Manchester--are well above the mean. Most of the remaining eight communities are very wealthy in terms of income and per pupil valuation. Quincy does not conform to these trends. Its wealth, in terms of the three "indicators" is slightly below average.

Table 15 shows the impact of state aid on local taxpayers. Regionwide, state aid accounts for an average reduction in full value tax rates of $14.18 or 24 percent. Property owners of many communities benefit even more. The reduction in Bellingham amounts to $36.06, 51 percent of its tax rate. Revere experienced 49 percent tax rate reduction, the second largest reduction due to state aid. Fifteen communities also had significant reductions in their tax rates due to aid, all between 33 and 39 percent. They include Malden, Randolph, Stow, Lynn, Chelsea, Franklin, Wrentham, Hudson, Somerville, Milford, Winthrop, Norfolk, Pembroke, Reading and Rockland.

TABLE 14
AID AS A PERCENT OF EXPENDITURES, 1980

Community	Total Expenditures	Total Aid	Aid as a Percent of Expenditures
Acton	$ 14,230,000	$ 3,443,576	24 %
Arlington	41,839,000	6,871,912	16
Ashland	7,811,000	1,643,592	21
Bedford	13,055,000	2,082,559	16
Bellingham	10,652,000	4,432,096	42
Belmont	24,505,000	3,252,367	13
Beverly	31,228,000	5,308,197	17
Bolton	1,876,000	462,308	25
Boston	794,665,000	176,656,993	22
Boxborough	2,066,000	454,700	22
Braintree	38,816,000	5,343,300	14
Brookline	58,714,000	5,383,292	9
Burlington	27,001,000	4,552,413	17
Cambridge	127,344,000	14,221,746	11
Canton	17,097,000	3,097,020	18
Carlisle	3,204,000	968,954	30
Chelsea	23,915,000	7,524,570	31
Cohasset	7,411,000	1,137,439	15
Concord	17,404,000	3,168,780	18
Danvers	35,445,000	3,318,032	9
Dedham	21,770,000	3,415,327	16
Dover	5,065,000	814,020	16
Duxbury	13,152,000	2,116,478	16
Essex	2,429,000	412,173	17
Everett	38,314,000	3,750,459	10
Foxborough	12,277,000	2,943,495	24
Framingham	57,830,000	11,424,790	20
Franklin	15,092,000	4,519,442	30
Gloucester	25,412,000	4,962,590	20
Hamilton	4,349,000	1,219,421	28
Hanover	10,968,000	2,399,282	22
Hingham	18,787,000	3,009,449	16
Holbrook	9,286,000	2,575,240	28
Holliston	11,310,000	2,853,485	25
Hopkinton	5,311,000	1,214,633	23
Hudson	12,485,000	4,324,753	35
Hull	14,144,000	2,466,040	17
Ipswich	9,339,000	1,869,918	20
Lexington	33,092,000	4,939,227	15
Lincoln	5,611,000	1,282,240	24
Littleton	5,666,000	1,054,141	19
Lynn	78,322,000	23,344,008	30
Lynnfield	9,398,000	1,729,591	18
Malden	43,320,000	12,561,499	29
Manchester	5,440,000	656,612	12
Marblehead	21,078,000	2,006,828	10
Marlborough	23,976,000	6,681,010	28
Marshfield	18,918,000	3,455,157	18
Maynard	8,476,000	1,869,013	22
Medfield	9,064,000	2,248,037	25
Medford	$ 47,085,000	$ 9,831,342	21 %
Medway	8,332,000	2,199,400	26
Melrose	25,460,000	5,534,784	22
Middleton	5,219,000	449,247	9
Milford	18,075,000	5,648,096	32
Millis	5,698,000	1,369,732	24
Milton	20,797,000	2,287,853	11
Nahant	3,240,000	383,248	12
Natick	29,196,000	4,248,926	15
Needham	34,662,000	3,073,359	9
Newton	93,194,000	10,404,504	11
Norfolk	4,208,000	1,631,727	39
N. Reading	10,107,000	2,248,953	22
Norwell	9,735,000	2,321,442	24
Norwood	36,392,000	4,933,024	14
Peabody	43,986,000	8,828,700	20
Pembroke	9,511,000	3,983,015	42
Quincy	112,780,000	12,901,017	11
Randolph	23,758,000	6,632,078	28
Reading	20,822,000	7,320,686	35
Revere	36,971,000	10,222,629	28
Rockland	13,233,000	4,360,373	33
Rockport	5,433,000	569,130	10
Salem	45,166,000	5,884,883	13
Saugus	20,655,000	3,889,454	19
Scituate	17,582,000	3,308,949	19
Sharon	13,047,000	2,497,584	19
Sherborn	4,360,000	922,342	21
Somerville	61,255,000	19,850,746	32
Southborough	5,886,000	1,300,587	22
Stoneham	17,192,000	2,829,894	16
Stoughton	19,502,000	4,293,180	22
Stow	4,194,000	1,423,503	34
Sudbury	13,907,000	3,849,688	28
Swampscott	13,926,000	1,940,115	14
Topsfield	4,495,000	713,980	16
Wakefield	22,663,000	4,339,165	19
Walpole	17,631,000	3,974,727	23
Waltham	51,789,000	7,325,736	14
Watertown	33,072,000	4,834,522	15
Wayland	14,319,000	2,748,809	19
Wellesley	29,148,000	3,280,505	11
Wenham	2,308,000	560,677	24
Weston	14,324,000	1,899,237	13
Westwood	14,603,000	2,091,134	14
Weymouth	47,274,000	10,495,491	22
Wilmington	17,736,000	3,696,387	21
Winchester	21,961,000	3,107,892	14
Winthrop	13,042,000	4,122,875	32
Woburn	31,621,000	5,853,814	19
Wrentham	5,433,000	1,831,159	34

Sources: Massachusetts Taxpayers Foundation, 1980.
Massachusetts Department of Revenue, 1980.

TABLE 15
IMPACT OF STATE AID ON FULL VALUE TAX RATES, 1980

Community	Full Value Tax Rate	Reduction Due to Aid	
		Dollar	Percent
Acton	$ 31.17	$ 10.16	25 %
Arlington	47.98	11.24	19
Ashland	45.51	13.27	23
Bedford	37.76	7.99	17
Bellingham	34.89	36.06	51
Belmont	37.69	6.96	16
Beverly	43.80	11.50	21
Bolton	25.68	9.07	26
Boston	114.73	46.11	29
Boxborough	29.22	9.49	25
Braintree	42.18	9.26	18
Brookline	61.00	7.33	12
Burlington	41.19	10.00	20
Cambridge	78.28	15.51	17
Canton	41.53	11.18	21
Carlisle	28.15	12.61	31
Chelsea	102.43	55.21	35
Cohasset	33.20	7.60	19
Concord	34.43	8.35	20
Danvers	35.48	7.84	18
Dedham	40.35	8.60	18
Dover	25.43	5.29	17
Duxbury	38.83	9.59	20
Essex	26.38	8.18	24
Everett	42.71	5.28	11
Foxborough	36.57	15.19	29
Framingham	42.89	12.64	23
Franklin	45.77	24.34	35
Gloucester	43.04	12.98	23
Hamilton	27.91	10.39	27
Hanover	40.02	14.55	27
Hingham	38.08	8.65	19
Holbrook	43.47	19.82	31
Holliston	39.47	15.86	29
Hopkinton	30.19	10.88	26
Hudson	43.85	25.48	37
Hull	60.57	22.00	27
Ipswich	35.43	11.93	25
Lexington	35.26	7.41	17
Lincoln	23.86	8.77	27
Littleton	34.41	10.21	23
Lynn	80.86	41.76	34
Lynnfield	24.56	6.82	22
Malden	56.35	28.23	33
Manchester	26.75	4.65	15
Marblehead	28.81	4.29	13
Marlborough	44.19	19.54	31
Marshfield	38.98	11.27	22
Maynard	43.19	14.85	26
Medfield	39.22	15.25	28
Medford	$ 48.92	$ 16.78	26 %
Medway	40.31	18.11	31
Melrose	48.97	16.33	25
Middleton	33.78	6.65	16
Milford	39.88	24.83	38
Millis	41.65	16.42	28
Milton	40.06	6.02	13
Nahant	35.58	6.13	15
Natick	41.60	8.86	18
Needham	33.05	5.30	14
Newton	51.21	7.74	13
Norfolk	32.73	21.25	39
N. Reading	35.48	13.32	27
Norwell	41.69	16.51	28
Norwood	36.52	11.66	24
Peabody	48.71	15.65	24
Pembroke	42.95	27.60	39
Quincy	64.01	13.23	17
Randolph	41.99	20.86	33
Reading	35.76	22.57	39
Revere	65.00	29.27	49
Rockland	46.92	30.22	39
Rockport	22.28	3.47	13
Salem	50.74	12.32	20
Saugus	36.93	10.62	22
Scituate	41.13	11.94	22
Sharon	42.69	12.09	22
Sherborn	37.20	9.80	21
Somerville	66.14	38.32	37
Southborough	31.59	10.27	25
Stoneham	38.90	9.38	19
Stoughton	38.83	13.14	25
Stow	35.62	17.66	33
Sudbury	36.28	13.08	26
Swampscott	43.79	8.69	17
Topsfield	28.33	6.51	19
Wakefield	44.29	13.12	23
Walpole	39.34	14.84	27
Waltham	42.17	9.04	18
Watertown	52.78	11.59	18
Wayland	38.42	10.59	22
Wellesley	33.43	5.39	16
Wenham	26.73	8.17	23
Weston	31.88	6.00	16
Westwood	35.80	7.05	16
Weymouth	47.07	16.76	26
Wilmington	42.17	13.18	24
Winchester	57.77	8.44	13
Winthrop	36.43	22.68	38
Woburn	41.96	11.24	21
Wrentham	38.04	20.41	35

Sources: Metropolitan Area Planning Council, 1980.
Massachusetts Department of Revenue, 1980.

TABLE 16
IMPACT OF "ADDITIONAL AID"* ON FULL VALUE TAX RATES, 1980

Community	Full Value Tax Rate	Reduction Due to Aid	
		Dollar	Percent
Acton	31.17	.64	2
Arlington	47.98	1.25	3
Ashland	45.51	1.20	3
Bedford	37.76	.57	1
Bellingham	34.89	6.96	17
Belmont	37.69	.68	2
Beverly	43.80	1.31	3
Bolton	25.68	.48	2
Boston	114.73	6.08	5
Boxborough	29.22	4.53	13
Braintree	42.18	.89	2
Brookline	61.00	.89	1
Burlington	41.19	.72	2
Cambridge	78.28	2.96	4
Canton	41.53	.99	2
Carlisle	28.15	.44	2
Chelsea	102.43	14.98	13
Cohasset	33.20	.64	2
Concord	34.43	.48	1
Danvers	35.48	.70	2
Dedham	40.35	.95	2
Dover	25.43	.26	1
Duxbury	38.83	.54	1
Essex	26.38	.64	2
Everett	42.71	.54	1
Foxborough	36.57	1.36	4
Framingham	42.89	1.12	3
Franklin	45.77	2.69	6
Gloucester	43.04	1.04	2
Hamilton	27.91	.68	2
Hanover	40.02	1.18	3
Hingham	38.08	.71	2
Holbrook	43.47	1.92	4
Holliston	39.47	1.30	3
Hopkinton	30.19	.76	2
Hudson	43.85	2.25	5
Hull	60.57	2.16	3
Ipswich	35.43	1.09	3
Lexington	35.26	.54	2
Lincoln	23.86	.44	2
Littleton	34.41	.96	3
Lynn	80.86	9.23	10
Lynnfield	24.56	.57	2
Malden	56.35	5.17	8
Manchester	26.75	.36	1
Marblehead	28.81	.42	1
Marlborough	44.19	1.64	4
Marshfield	38.98	.96	2
Maynard	43.19	1.33	3
Medfield	39.22	1.41	3
Medford	48.92	3.04	6
Medway	40.31	1.55	4
Melrose	48.97	1.83	4
Middleton	33.78	.66	2
Milford	39.88	3.02	7
Millis	41.65	1.30	3
Milton	40.06	.89	2
Nahant	35.58	.87	2
Natick	41.60	.90	2
Needham	33.05	.55	2
Newton	51.21	.81	2
Norfolk	32.73	1.52	4
N. Reading	35.48	1.25	3
Norwell	41.69	1.07	3
Norwood	36.52	1.16	3
Peabody	48.71	1.43	3
Pembroke	42.95	1.72	4
Quincy	64.01	1.63	2
Randolph	41.99	1.98	5
Reading	35.76	1.14	3
Revere	65.00	8.82	12
Rockland	46.92	4.54	9
Rockport	22.28	.31	1
Salem	50.74	1.26	2
Saugus	36.93	1.00	3
Scituate	41.13	1.01	2
Sharon	42.69	1.02	2
Sherborn	37.20	.70	2
Somerville	66.14	7.46	10
Southborough	31.59	.63	2
Stoneham	38.90	1.03	3
Stoughton	38.83	1.31	3
Stow	35.62	.84	2
Sudbury	36.28	.74	2
Swampscott	43.79	.82	2
Topsfield	28.33	.55	2
Wakefield	44.29	1.23	3
Walpole	39.34	1.47	4
Waltham	42.17	.98	2
Watertown	52.78	1.51	4
Wayland	38.42	.65	2
Wellesley	33.43	.44	1
Wenham	26.73	.53	2
Weston	31.88	.33	1
Westwood	35.80	.52	1
Weymouth	47.07	1.81	4
Wilmington	42.17	1.09	3
Winchester	57.77	1.13	2
Winthrop	36.43	2.52	6
Woburn	41.96	1.03	2
Wrentham	38.04	1.32	3

*Refers to the $166 million appropriated for property tax reduction in 1980.

Sources: Metropolitan Area Planning Council, 1980.
Massachusetts Department of Revenue, 1980.

Bellingham, which has the highest reduction in the tax rate due to aid, was significantly below the average in terms of per capita income and per pupil valuation and somewhat below average in terms of per capita valuation. Chelsea, well below average in all three indicators of wealth, seems to be a logical member of this group of communities whose tax rates are greatly reduced by state aid. In fact, a number of communities seem logical members of this group--Lynn, Wrentham, Somerville, Norfolk and Rockland. The membership of one other, Franklin, is marginal. It is only slightly below average in one indicator of wealth--per capita income. The inclusion of Revere (having the second largest reduction), Malden, Stow, Pembroke and Reading--all having average or above average per capita incomes, per capita valuations and per pupil valuations--is questionable.

For the fiscal year 1980, the State distributed an "additional" sum of money to cities, towns, and regional school districts ($166 million statewide) for the purpose of "reducing property taxes" (stated as a footnote on the cherry sheets). The impact of this "additional aid" on full value property taxes is displayed in Table 16.

The average reduction to the tax rates of MAPC communities due to this "additional aid" was $1.67 (three percent). It did have a far greater impact, however, on a half-a-dozen communities. Bellingham reduced its tax rate by 17 percent ($6.96) because of these funds. Boxborough and Chelsea reduced theirs by 13 percent each. In Chelsea, the reduction amounted to $14.98 on its tax rate. Revere's tax rate went down by 12 percent and Lynn's and Somerville's by 10 percent each. Forty-six communities each experienced less than a dollar reduction due to the "additional aid". Among these 40 were all the communities with high or exceptionally high per capita incomes, per capita valuations and/or pupil valuations. Nearly all of those that were found to be the least wealthy in terms of the three indicators examined, ended up with above average reductions in their tax rates due to the "additional aid".

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- Blank notice used in Figure 2

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